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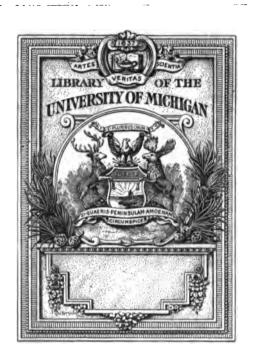
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## THIRTY-FIRST ANNUAL REPORT

OF THE

# Board of Health of the State of New Jersey

1907

AND

Annual Report of the Bureau of Vital Statistics



TRENTON, N. J.

THE JOHN L. MURPHY PUBLISHING CO., PRINTERS.
1908.

## Board of Health of the State of New Jersey.

C. F. Brackett, President.	•
THE SECRETARY OF STATE	)
THE ATTORNEY-GENERAL	Members ex-officio.
THE SECRETARY OF STATE  THE ATTORNEY-GENERAL  THE STATE GEOLOGIST	)
WILLIAM H. MURRAY,	GEORGE P. OLCOTT,
HENRY B. RUE,	WILLIAM M. LANNING,
LABAN DENNIS.	
HENRY MITCHELL, Secretary.	•
	(iii)

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TRENTON, N. J., October 31st, 1907.

To His Excellency Edward C. Stokes, Governor of New Jersey:

Sim—In compliance with the provisions of section 3 of chapter 68 of the laws of 1887, I have the honor to transmit herewith the thirty-first annual report of the Board of Health of the State of New Jersey, and the report of the Bureau of Vital Statistics.

Very respectfully,

HENRY MITCHELL, Secretary.

(1)

### Secretary's Report.

To the Board of Health of the State of New Jersey:

Gentlemen—The duties assigned by law to the State board of health were, under the provisions of the acts of 1878-1887, almost altogether advisory and educational in character, but subsequent legislation added certain executive powers and greatly extended the scope of the work to be performed. The bureau of vital statistics, which was placed under the supervision of the board by the act of 1878, has been supplied with the necessary funds from year to year by the annual appropriation to permit of the adoption of improved methods for tabulating the returns of marriages, births and deaths, and for filing the records, and sufficient appropriations have been made for the enforcement of the acts to prevent the sale of adulterated and unwholesome food, for the salary of the secretary and for the salary of one sanitary inspector, but no appropriation whatever has been made for the enforcement of the act to prevent the pollution of public water-supplies, nor for the inspection of dairies, nor for the inspection and licensing of creameries, nor for the enforcement of the act requiring that local health officers and sanitary inspectors shall be tested for fitness, nor for the detection of violations of the act to prevent the sale of dangerous illuminating oil, nor for obtaining the skilled advice required by the provisions of chapter 277 of the laws of 1890, nor has the amount appropriated for the restriction of infectious diseases of animals been at all adequate for the prevention of the importation of glandered horses, nor for protective inoculations of cattle against the infection of anthrax. The amounts available during the fiscal year ending October 31st, 1907, were approximately as follows: For the bureau of vital statistics, \$7,277; for office stationery, expressage and postage, and for expenses of members, \$800; for salary and expenses of sanitary inspector, \$2,463; for distribution of the annual report, \$410; for salary of secretary, \$2,500;

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for infectious diseases of animals, \$2,000; for enforcement of acts to prevent the sale of adulterated food and drugs, \$20,000.

From the foregoing it will be seen that the performance of all of the duties imposed by the laws upon the State board of health has been impossible because of insufficient funds with which to employ the necessary assistants. This need was brought to the attention of the legislative committee on appropriations on several occasions, but the necessary sums were not granted. urgent duties have therefore been given preference, and the annual reports show what has been done. It is unquestionably highly desirable in the public interests that sufficient funds should be provided to make possible the enforcement of every act which is upon the statute books, the judicious enforcement of which will promote the public health, and it is also desirable, because of the executive nature of many of the provisions of the more recent acts, that the administrative authority for the enforcement of all of the health laws having general application should be vested in the State department of health, including the acts relating to the bureau of vital statistics, the act to prevent the sale of adulterated and unwholesome food and drugs, public water-supplies and sewerage, laboratory diagnosis, sanitary inspection and infectious diseases of animals.

Population.—The estimated population of the counties of New Jersey, and also of forty-eight of the larger municipalities, for the year 1906, is stated in the following table. The table also shows the census figures for the past twenty-five years:

TABLE 1.—POPULATION OF THE COUNTIES OF NEW JERSEY AND OF MUNICIPALITIES HAVING 5,000 INHABITANTS OR OVER FOR THE CENSUS YEARS 1880, 1885, 1890, 1895, 1900, 1905, AND ESTIMATED POPULATION FOR 1906.

	1880.	1885.	1890.	1895.	1900.	1905.	1906.
Atlantic County	18,704	22,356	28,836	34,750	46,402	59,862	62,554
		22,356 7,942	13,055	18,329	27,838	37,593	39,54
Rergen County	36,786	39,880	47,226	65,251	78,441	100,003	104,31
Englewood Garfield Hackensack		*********	***********	*********	6,253	7,922	8,256
Garfield	************			*************		5,092	5,410
Hackensack	***********		6,004	7,282	9,443	11,098	11.429
Rutherford	*********	********	**********	*********	*********	5,218	5,37
Burlington County	55,403	57,558	58,528	59,117	58,241	62,042	62,80
Bordentown	5,334	5,857	5,090	5,176	4,110 7,392	4,073	4,073
Burlington		7,690 76,685	7,264 87,687	7.844	7,392	8,038	8,167 124,337
Camden County	41,659	50,080	58,313	100,104 63,467	107,643 75,935	121,555 83,363	84,849
Camden CityGloucester City	5,347	52,884 5,966 10,744	6,564	6,225	6.840	8 055	0 000
Cape May County	9,765	10.744	11,268	12,855	6,840 13,201 51,193 13,913	8,055 17,390	18,225
Cumberland County	37,687	41,982	45 438	49,815	51.198	52,110	52,29
Bridgeton	8,722	10,065	45,438 11,224	13,292	13,913	13,624	13,62
Millville	7.660	8,824	10,002	10,466	10,588	11,884	12,14
Essex County	189,929	8,824 213,764	256,098	312,000	359,053	409,928	420,10
Bloomfield		*** *******	7,708	8.093	9,668	11.668	12,068
East Orange	Secretario Contractor		7,708 13,282	8,093 17,927	21,506	25,175	25,909
Irvington			*********	3,388	5,255	7,180	25,909 7,565
Montelair	***************************************		8,656	3,388 11,753	13,962	25,175 7,180 16,370	16,853
Newark	136,508	152,988	181,830	215,806 22,792	246,070	283,289 26,101	290,733
Orange	13,207	15,231	18,844	22,792	24,141	26,101	26,493
West Orange	**********		4,358	5,854	6,889 31,905	7,872 34,477	8,069 34,991
Gloucester County	25,886	27,603 240,342	28,649	31,191	31,905	34,477	34,991
Hudson County	187,944	240,342	275,126	328,680	386,048	449,879	462,64
Bayonne	9,372	33,080	19,033	19,856	386,048 32,722 10,596	42,262 12,823	44,170
Harrison	6,898	6,806 37,721	8,338	9,672	10,596	12,823	13,268
Hoboken	30,999 120,722	37,721	43,648	54,083	09,364	65,468 232,699	66,689
Jersey City	120,722	153,513	163,003	182,713 10,487	206,433 10,896	13,601	237,952 14,142 17,369
Kearny Town of Union	5 040	8,398	10,613	13,336	15,090	17,005	17 960
West Hobelson	0,049	0,000	11,665	18,296	15,187 23,094	17,005 29,082	30,280
West Hoboken		***********	11,000	10,200	5 267	7.196	7.589
Hunterdon County	38,570	37,420	35,355	35,334	5,267 34,507	7,196 33,258	7,582 33,258
Lambertville		137,120	Dojaco	00,002	01,001	5.016	5,092
Mercer County	58,061	66,785	79,978	85,538	95,365	110,516	113,546
Chambersburg	5.437	8,542		**********		**********	
Princeton						6,029	6,455
Trenton	29,910	34,386 56,180	57,458 61,754	62,518	73,307	84,180 97,036	86,355
Middlesex County	52,286 17,166	56,180	61,754	70,058	79,762	97,036	100,491
New Brunswick	17,166	18,258	19,603	19,910	20,006 17,699 6,349	23,133	23,758 27,534
Perth Amboy			9,512	13,030	17,699	25,895	27,534
South Amboy			4,330	5,571	6,349	6,258 87,919	6,258 89,091
Monmouth County,	55,538	62,324	69,128	75,543	82,057	87,919	
Asbury Park	**********	5.140	7 001	7 000	0.070	12,183	9,604 12,845
Red Bank		0,140	7,231 4,145	7,333 4,888	8,872	0 969	6,430
Morris County	50,861	50,675	54,101	59,536	5,428 65,156	6,263 67,934 6,353	68,490
Dover	50,001	50,075	34,101	00,000	5,938 11,267 19,747 155,202 27,777 105,171	6 353	6 436
Morristown	6.837	8.760	8,156	10,290	11 267	19 146	6,436
Ocean County	14,455	8,760 15,586	15,974	12 720	19.747	12,146 20,880	21,107
Passaic County	68,860	83,374	105,046	133,227 17,894 97,344	155 202	175,858 37,837 111,529	179,989
Passaic City	6,532	00,013	13,028	17.894	97 777	37.837	39,849
Paterson	51,031		78,347	97.344	105,171	111,529	112,801
Calam County	04 570	25,373	25,151	26,084	25,530	26,278	26,438
Salem City	5,056	5,316	5,516	6,337	5.811	12 440	6,569
Salem City Somerset County North Plainfield	27,162	5,316 27,425	28,311	30,447	5,811 32,948	36,270	36,934
North Plainfield				4,245	5,009	9,010	5,737
Sussex County	23,539	22,401	22,259	4,245 22,586	24,134	23,325	23,325
Union County	55,571	61,839	72,467 37,764 11,267 7,105	85,404	99,353	117,211 60,509	120,788
Elizabeth	28,229 8'125	32,119	37,764	43,834	52,130 15,369	60,509	62,185
Plainfield	8'125	8,913	11,267	13,629 7,945	15,369	18,468	19,088
Rahway	6,455	6,861	7,105	7,945	7,935	8,649	8,792
Summit		*********		4,450	5,302	6,845	7,154
Westfield,		OF 500	00.750	OF 000	00.00	5,265	5,452
Warren County	36,589	37,737	36,553	37,283	37,781	40,403	40,927
Phillipsburg	7,181	8,058	8,644	9,081	10,052	13,352	14,012

TABLE 2.—SHOWING NUMBER OF WHITE AND COLORED INHABITANTS IN NEW JERSEY, WITH DEATH-RATES PER 1,000 POPULATION, FOR FIVE YEARS, 1901–1905.

YEARS.	Estimated population (total).	Estimated population (colored).	Total death- rate.	Death- rate, white.	Death- rate, colored.
1901	1,883,669	72,011	16.48	16.65	21.79
1902	1,925,781	74,178	15.91	17.83	21.00
1903	2,016,797	76,345	15.87	15.44	24.32
1904	2,058,909	78,512	17.14	16.91	22.95
1905	2,144,143	79,485	15.79	15,57	21.59

Births.—The number of certificates of births received during the year ending December 31st, 1906, was 42,677, an increase of 2,988 compared with the number reported during the previous year, showing that substantial progress has been made in the effort to secure more complete reports of births from physicians and midwives, but experience elsewhere has shown that a still larger proportion of births would be reported if the provisions of the legislative bill of 1905 (Senate 183) should be made operative. It is not enough to point out to the professional attendants at births that the official record has statistical and legal value, and to provide a penalty for failure to certify each birth as the law requires, but it is also essential that the time limit during which the certificates may be forwarded to the local registrars shall be short, and it is equally necessary that the local registrar shall be stimulated to collect and forward certificates in the case of every birth. In the bill above referred to the fee of the local officer was increased from ten to twenty cents for each certificate forwarded to the State bureau of vital statistics, and the time during which the certificate might

be prepared was limited to five days. The increase in the proportion of births registered during the past two years has been due, in part at least, to the decided improvement in the personnel of the employes of local boards of health which has occurred in consequence of the provisions of the act of April 8th, 1903, and the better appreciation on the part of these officers of the value of full and complete records of vital facts. Much credit should also be given to the State registrar of vital statistics, Mr. D. S. South, for his unceasing efforts to secure the co-operation of local officers and to detect violations of the law on the part of professional attendants at births.

TABLE 3.—SHOWING POPULATION, NUMBER OF BIRTHS REPORTED, NUMBER OF MARRIAGES AND NUMBER OF DEATHS IN NEW JERSEY, WITH BIRTH-RATES, MARRIAGE-RATES AND DEATH-RATES FOR THE TWENTY-EIGHT YEARS ENDING DECEMBER 31, 1906.

		BIR	гнз.	•MARR	IAGES.	DEATHS.		
YEAR.	Population.*	Number of births reported.	Birth- rate per 1,000 popula- tion.	Number of mar- riages.	Persons married per 1,000 popula- tion.	Number of deaths.	Death- rate per 1,000 popula- tion.	
1879. 1880. 1881. 1892.	1,189,658	23,116 23,680 23,484 23,108	22.65 20.94 20.24 19.42	7,096 7,963 8,109 8,887	13.91 14.08 13.98 14.86	20,440 18,967 20,812 25,959	20.08 16.77 17.94 21.82	
1883	1,248,224 1,278,033 1,310,481	24,430 25,263 24,077 25,497 27,340	20.21 20.29 18.84 19.46 20.36	9,166 8,968 8,989 12,351 15,416	15.16 14.37 14.07 18.85 22.96	23,310 21,716 28,807 22,734 24,331	19.28 17.40 18.63 17.35 18.12	
1888	1,407,625 1,441,017 1,478,784	28,074 29,099 30,108 28,882 80,627	20.41 20.67 20.89 19.53 20.26	16,025 15,726 15,564 15,305 16,082	23.31 22.34 21.60 20.70 21.28	27,173 26,543 28,530 28,840 32,685	19.76 18.86 19.80 19.50 21.62	
1898. 1894. 1895. 1896.	1,538,799 1,578,373 1,672,942 1,718,543	32,285 33,662 31,742 31,207	20.98 21.33 18.97 18.16	17,178 16,245 15,873 18,370	22.33 20.58 18.98 21.38	30,596 30,004 30,634 30,767	19.88 19.09 18.31 17.90	
1897	1,810,008 1,855,872 1,883,669 1,925,781	31,595 32,515 29,419 32,270 34,812	17.91 17.96 15.84 17.13 18.08	18,171 13,213 13,336 14,611 16,539	20.60 14.59 14.37 15.51 17.18	29,822 27,337 30,999 31,474 31,739	16.90 15.11 16.70 16.62 16.48	
1902	2,016,797 2,058,909	35,116 37,242 38,751 39,689 42,677	17.84 18.47 18.82 18.51 19.43	18,150 19,512 18,919 20,572 21,580	18.45 19.35 18.38 19.19 19.65	31,319 31,820 35,298 33,864 85,670	15.91 15.87 17.14 15.79 16.24	

<sup>\*</sup> Estimated except for census years.

Note.—The reports of births are not as complete as are those for marriages and deaths, hence the above table does not represent with accuracy the relation between birth-rates and death-rates.

Note.—The large number of marriages reported during the years 1886-1897 was due to the unrestricted authority contained in the laws for the performance of the marriage ceremony in the case of non-residents, and the marked decrease in the number of marriages which occurred in 1898 was directly consequent upon the enactment of the law requiring a license in cases where both parties are non-residents of the State.

Marriages.—The records show that the number of marriage certificates received during the year ending December 31st, 1906, was 21,580, an increase of 1,008 over the number recorded during the previous year.

TABLE 4.—SHOWING NUMBER OF MARRIAGES RECORDED IN NEW JERSEY FOR THE TWENTY-EIGHT YEARS ENDING DECEMBER 31, 1906.

e										
YEAR.		1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.
Marriages in New Jers	еу	7,096	7,963	8,109	8,837	9,166	8,968	8,989	12,851	15,410
Persons married perpopulation	r 1,000	18.91	14.08	18.98	14.86	15.16	15.87	14.07	18.85	22.90
YEAR.		1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.
Marriages in New Jers	еу	16,025	15,726	15,564	15,305	16,082	17,178	16,245	15,878	18,870
Persons married per population	r 1,000	23.81	22.34	21.60	20.70	21.28	22.33	20.59	18.98	21.38
YEAR.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.
Marriages in New Jersey	18,171	18,213	13,386	14,611	16,539	18,150	19,512	18,919	20,572	21,580
Persons married per 1,000 population	20.60	14.50	15.40	15.51	17.28	18.45	19.35	18.38	19.19	19.65

December 31st, 1906, was 35,670. The estimated population is 2,196,238, and the annual death-rate is therefore 16.24 per 1,000 inhabitants living. By reference to the following chart it will be seen that these figures compare very favorably with those of preceding years, and that the average mortality (16.27) during the past ten years has been much lower than that which prevailed during the previous decade (19.28).

CHART SHOWING DEATH-RATES IN NEW JERSEY, PER 1,000 INHABITANTS, FOR TWENTY-RIGHT YEARS, 1879-1906.

YEAR	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1881	1892	1893	1894	1895	1896	1897	1898	1899	0061	1061	1902	1903	1904	1905	9061
DEATH RATE PER 1000 INHABITANTS	20.03	16.77	17.94	21.82	19.28	17.40	1 8.63	17.35	18.12	19.76	18.86		1 9.50	29.12	1 9.88	19.09	18.31	17.90	16.90	15.11	1,6.70	16.62	16.48	16.91	15.87	17.14	15.79	16.24
22.00		Г			Г				Г																			
21.50				A										A														
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17.00		V	Γ			7		•											$\overline{}$							•		
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15.50			Г	Г												П	П			$\nabla$	П			7	_		V	M
15.00																				٧					-	Ï		

TABLE 5.—DEATHS IN NEW JERSEY, BY AGE PERIODS, FOR THE YEAR ENDING DECEMBER 31. 1906.

	_		<u> </u>	_							<u>-</u> -							_	=	=
		AGE PERIODS.																		
	Under 1 mo.	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 70.	70 to 80.	80 to 90.	Over 90.	Not stated.	Total number of
-,-	2545	5228	3473	913	576	875	1804	1899	1455	1746	1621	1624	1690	1818	3920	3437	1787	<b>25</b> 5	9	35

TABLE 6.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM CERTAIN CLASSIFIED DISEASES FOR TWENTY-EIGHT YEARS, 1879-1906.

DISEASES.	1879.	1880.	1881.	1882.	1883.	1884.	1885	1886.	1887.
Acute lung diseases	2,160	1,988	2,208	2.752	2,756	2,174	2,566	2,300	2,557
Consumption, M	2.788	2.714		1,696	1,527	1,557	1,678	1,651	1,910
Consumption, F	1,849	2.166	2.805	1,779 2,792					
Adult brain and spinal diseases Brain and nervous diseases of chil-	1.314		1,502	1,521				1,932	
dren	1.647	1,638		1,999	1,683	1,598	1,791	1,774	1,886
Discuses of the near and circulation		982 873		1,181	1,235		1,508		
Diphtheria and croup Digestive and intestinal diseases	1,100 1,041	1,005			1,146 928	1,027 1,075	1,496 1,140		1.242
Renal and cystic diseases	558	516		765	759	892	939	926	878
Violent deaths	378	425	451	798 402	907 461	484	857 498	997 546	1,051 574
Typhoid fever	324	373	574	884	564	640	642	545	522
Scarlet fever	194	578 244	499 308	1,306 244		547 221		222 257	255 263
Whooping cough	277	130	110	253	189	116	181	274	181
Measles	268 77	293 87	431 70	379 206	290 131				217 296
Krysipelas	137	109	124	94	90	80	74	79	96
Small-pox		64 15	89 254	52 <b>367</b>	33 54			JO4	2 <sup>182</sup>
Total deaths per year	15 797	15 542	17 589	25 910	28 310	21.716	28 807	22.734	24.831

TABLE 6.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM CERTAIN CLASSIFIED DISEASES FOR TWENTY-EIGHT YEARS, 1879–1906—(Continued).

DISEASES.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.
Acute lung diseases	2,922	2,862	3,804	4.101	3,187	3,974	4,183		4,146
Consumption, M	1,723	1,772	1,903	1,849	1,851	1,790		1,860	1,786
Consumption, F Diarrhoeal diseases of children	1,635	1,677	1,767	1,607	1,724	1,637	1,602		
Diarrhœal diseases of children	3,508	3,377	3,527	3,191	4,043	3,981	3,893		
Adult brain and spinal diseases Brain and nervous diseases of chil-	2,095	1,991	2,308	2,333	2,457	2,611	2,413	2,626	2,610
Brain and nervous diseases of chil-									
dren	1,971	1,923	2,032			2,072	2,083	1,925	
Diseases of the heart and circulation	1,691	1,786	1,945	1,960	2,183	2,179	2,112	2,268	
Diphtheria and croup. Digestive and intestinal diseases. Renal and cystic diseases. Violent deaths.	2,036	1,574	1,575	1,737	1,776	1,677	1,294	1,464	
Digestive and intestinal diseases	1,476	1,450	1,521	1,573	1,625	1,753			1,622
Welland double diseases	1,020	1,056	1,149	1,200	1,444	1,441	1,447	1,523	1,584
Concer deaths	612	1,077 579	1,235 640		1,427	1,538	1,500 731	1,469 770	1,426 811
Cancer	620	579 724	782	642 695	688 628	723	731 485		577
Typhoid feverScarlet fever	574		209			506	272	568	183
Duornorel	271	254	209 250		1,008 282	445 282	293	264 294	283
Whosping cough	161	278	371	299	163	237	328	272	275 275
Puerperal	264	203	195	180	198	148	162	144	119
Measles	74	118	174		197	73	257	95	390
Erveinelee	128	114	81	250 85	94	74	97	74	69
Erysipelas	142	117	106		100	102	91	82	59
Small-pox	5	113	100	۰۰ ا	38	43	ii	23	2
Total deaths per year	27,173	26,543	28,530	28,840	32,685	30,596	30,004	30,634	30,767

DISEASES.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.
Acute lung diseases	4,039		4,322		4,188	4,236	4,265	5,309	4,445	5,2 <b>30</b> ·
Consumption, M	1,765 1,472	1,772 1,453	1,956 1,628		3,257	3,015	3,380	3,670	3,587	8,654
Pneumonia					2,539	2,421				
Diarrhœal diseases of children. Adult brain and spinal dis-	3,450	2,958	3,568	3,010	1,895	1,878	1,603	2,423	2,290	2,397
eases	2,582	2,700	2,842	2,946	2,836	2,787	2,880	3,053	3,942	3,219
Brain and nervous diseases of children	1,809	1,642	1,950	1,767	2,012	1,806	1,795	1,986	2,095	1,717
Diseases of the heart and cir-	l '	l ' i	i • ′	,		1	i '	'	i '	
culation Diphtheria and croup	2,475 1,382	2,286 950	2,731 777	2,852 927	2,772 683			3,301 918	3,316 699	3,460 673
Digestive and intestinal dis-	1								*	
eases Renal and cystic diseases	1,572 1,752		1,556 1,925			2,042 2,021			2,183 2,487	
Violent deaths	1,685	1,451	1,724	1,724	2,153	1,775	2,010	2,206	2,162	2,313
CancerTyphoid fever	857 478	852 450	946 486	921 356	1,042 352	1,031 428	1,132 388		1,282 360	1,389 408
Typhoid fever	203	201	187	220	179	217	299		164	
Puerperal	321	264 155	267 282	288 306	207 157	225 281	279 245		238 186	322 388
Malarial fever	132 156	82 195			50 77	36 204	40 41		21 98	36 203
Erysipelas	68	58	88	111	71	69	86	113	90	94
Acute rheumatism	69	55	73	73 5	116 142		71 16		101	109
				<u>'</u>				'		<u>-</u>
Total deaths per year	29,822	27,337	30,999	31,474	31,739	31,319	<b>' 31,820</b>	35,298	<b>' 33</b> ,864	35,670

TABLE 7.—DEATHS IN NEW JERSEY, PER 10,000 POPULATION, FROM CEBTAIN CLASSIFIED CAUSES, FOR TWENTY-EIGHT YEARS.

CLASSIFIE	D CAU	8ES, F	OR TV	VENT	r-rigi	T YE	ARS.			
CAUSES OF DEATH.		1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.
Acute lung diseases		21.16	17.57	17.30	23.13	22.79	17.41	20.07	17.55	19.04
Consumption		27.31	1 23.99	17.30 25.76	23.13 29.21	25.81	25.75	25.97 22.25	24.45	19.04 27.20
Adult brain and spinal diseases	•••••	18.11 12.87	19.15 11.91	19.43 12.94	15.06 12.78	21.96 12.91	19.72 18.88	22.25 14.82	20.82 14.74	20.06 13.64
Brain and nervous diseases of	f chil-	!	11.51					. 1		
Diseases of heart and circulation		16.18	14.48	14.15	16.80 9.92	18.92 10.21	12.80 10.60	14.01 11.75	13.53 11.49	14.04 11.89
Diphtheria and croup		9.52 10.86	8.68 7.71	10.45 9.72	12.37	9.47	8.21	11.70	9.94	11.37
Digestive and intestinal disease	s	10.20	8.88	9.80	6.22	7.63	8.62	8.91 7.34	9.25	9.94
Violent deaths	· · · · · · · · · · · · · · · · · · ·	0.46	4.56	5.24	6.43 6.60	6.27 7.50	7.14	6.59	7.06 7.60	6.50 7.82
Cancer		8.70	3.75	3.88	3.37	3.81	3.87	3.89	4.15	4.21
Typhoid fever	• • • • • • • • • • • • • • • • • • • •	8.17	3.29 5.06	4 94 4.30	7.43 10.09	4.66 7.05	5.12 4.38	5.02 5.05	4.15 1.69	3.88 1.89
Puerperal	· · · · · · · · · · · · · · · · · · ·	1.90	2.15	2.61	2.05	1.63	1.77	2.09	1.96	1.98
Whooping cough	• • • • • • • • • • • • • • • • • • • •	2.71	1.14	1.02	2.12 3.10	1.56	.92 1.84	.41 1.62	2.09 1.85	1.84 1.61
Measles	· • • • • • • • • • • • • • • • • • • •	.75	2.59 .76	8.74 .60	.78	$\frac{2.39}{1.08}$	1.51	1.05	.67	2.20
Erysipelas		1.84	.96	1.06	.79	.74	.64	.57	.60	.71
Acute rheumatism	••••••	.74	.56 .18	.76 2.18	.43 3.08	.27 .44	.49 .56	.28 .01	.51 .03	.96
Diseases of heart and circulation Diphtheria and croup. Digestive and intestinal disease Renal and cystic diseases. Violent deaths. Cancer Typhoid fever. Scarlet fever. Puerperal Whooping cough. Malarial fever. Measles. Erysipelas. Acute rheumatism. Small-pox	••••••	**********	.10	2.10	0.00			.01		
CAUSES OF DEATH.		1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.
Acute lung diseases		21.74	20.83	26.89	27.73	34.31	25.82	26.50	27.49	24.12
Consumption		24.41	24.50	24.46	23.37	23.64	22.28	21.77	21.17	19.58
Consumption Diarrhœal diseases of children		25.50	23.99	24.47	21.57	23.64 26.74	25.87	24.66	22.89	22.15
Adult brain and spinal diseases. Brain and nervous diseases of	f chil-	15.23	14.14	16.01	15.77	16.25	16.96	15.28	15.69	15.18
dren		14.33	18.66	14.10	13.72	14.83	13.46	12.11	11.50	11.74
dren	a	12.29	12.68 11.18	18.49 10.92	13.25 11.74	14.41 11.74 10.74	14.16	12.74 8.19	13.55 8.75	14.09 10.22
Digestive and intestinal disease	8	14.80 10.73	10.30	10.55	10.63	10.74	10.89 11.39	9.92	9.49	9.48
Renal and cystic diseases	•••••	7.41	7.50	7.97	8.11	9.55	9.36	9.16	9.10 8.78	9.21
Cancer		9.59 4.45	7.65 4.11	8.57 4.41	9.23 4.34	9.48 4.55	9.99 4.69	9.50 4.63	4.60	8.29 4.71
Typhoid fever,		4.50	5.14	5.42	4.69	4.15	3.28	3.07	3.39	3.35
Scarlet fever		4.17 1.97	3.78 1.80	1.45 1.78	1.94 2.00	6.66 1.86	$\frac{2.89}{1.83}$	$\frac{1.72}{1.85}$	1.57 1.75	1.06
Whooping cough		1.17	1.97	2.57	2.07	1.07	1.54	2.07	1.62	1.60
Malarial fever	•••••	1.91 .53	1.44	1.35 1.20	1.21 1.69	1.30 1.30	.96 .47	$\frac{1.02}{1.62}$	.85 .56	1.69 2.26
Erysipelas.		.93	.80	.56	.57	.62	.48	.61	.41	.40
Acute rheumatism		.10	.83	.73	.51	.66	.66	.57	.49	.34
Diseases of heart and circulation Diphtheria and croup. Digestive and intestinal disease Renal and cystic diseases. Violent deaths. Cancer Typhoid fever. Scarlet fever. Puerperal Whooping cough. Malarial fever. Measles. Erysipelas. Acute rheumatism. Small-pox		.03	.02			.25	.27	.06	.13	.01
CAUSES OF DEATH.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.
			'							
Acute lung diseases Consumption	22.89 18.34	18.86 17.81	23.29 19.31	25.21 18.48	23.27 16.91	$\frac{23.18}{15.32}$	$\frac{22.73}{16.76}$	27.78 17.83	20.75 16.73	23.81 16.64
Diarrhœal diseases of children	19.55	16.34	19.23	15.83	9.84	9.54	7.95	11.77	10.68	10.91
Adult brain and spinal diseases Brain and nervous diseases of	14.63	14.91	15.31	15.49	16.20	16.40	16.60	16.51	13.72	14.62
children	1 10 25	9.06	10.53	9.29	11.26	9.72	9.95	10.68	9.77	7.82
tion	14.52	12.62	14 70	14.99	14 97	15.58	15.70	16.03	15.47	15.78
Diseases of heart and circula- tion		12.02	14.72		14.57	10.00				
Thenmomat	7.83	5.24	4 19	4.87	14.37 3.55	3.74	3.71	4.46	3.26	3.06
Digestive and intestinal diseases.	7.83	5.24	4 19	4.87 9.47	3.55 13.18	$\frac{3.74}{12.30}$ $\frac{10.38}{10.38}$	3.71 13.03	4.46 16.93	3.26 12.89 10.18	14.19 10.2
Digestive and intestinal diseases, Renal and cystic diseases	7.83 8.91 9.92	5.24	8.38 10.37	4.87 9.47 10.90	3.55 13.18 11.42 10.45	3.74 12.30 10.38 10.27	3.71 13.03 10.21 10.71	4.46 16.93 11.03 11.47	3.26 12.89 10.18 11.58	14.19 10.22 11.58
Digestive and intestinal diseases, Renal and cystic diseases Violent deaths.	7.83 8.91 9.92 9.55 4.83	5.24	8.38 10.37 9.29	9.47 10.90 9.00	3.55 13.18 11.42 10.45 11.20	3.74 12.30 10.38 10.27 9.02	3.71 13.03 10.21 10.71 9.97	4.46 16.93 11.03 11.47 11.56	3.26 12.89 10.18 11.58 10.08	14.19 10.22 11.58
Digestive and intestinal diseases, Renal and cystic diseases Violent deaths. Cancer Typhoid fever	7.83 8.91 9.92 9.55 4.83 2.70	5.24	8.38 10.37 9.29 5.10 2.62	9.47 10.90 9.00 4.81	3.55 13.18 11.42 10.45 11.20 5.42 1.83	3.74 12.30 10.38 10.27 9.02 5.24 2.17	3.71 13.03 10.21 10.71 9.97 5.61 1.92	4.46 16.93 11.03 11.47 11.56 5.46 1.87	3.26 12.89 10.18 11.58 10.08 5.98 1.68	14.19 10.22 11.56 10.53 6.32 1.86
Digestive and intestinal diseases, Renal and cystic diseases. Violent deaths. Cancer Typhoid fever. Scarlet fever.	7.83 8.91 9.92 9.55 4.83 2.70 1.15	5.24	8.38 10.37 9.29 5.10 2.62 1.01	9.47 10.90 9.00 4.81 1.87 1.16	3.55 13.18 11.42 10.45 11.20 5.42 1.83	3.74 12.30 10.38 10.27 9.02 5.24 2.17 1.10	3.71 13.03 10.21 10.71 9.97 5.61 1.92 1.48	4.46 16.93 11.03 11.47 11.56 5.46 1.87 2.02	3.26 12.89 10.18 11.58 10.08 5.98 1.68 .76	14.19 10.22 11.58 10.53 6.32 1.86
Digestive and intestinal diseases, Renal and cystic diseases. Violent deaths. Cancer Typhoid fever Scarlet fever. Puerperal Whooping cough.	7.83 8.91 9.92 9.55 4.83 2.70 1.15 1.57 1.81	5.24	8.38 10.37 9.29 5.10 2.62 1.01 1.44 1.51	4.87 9.47 10.90 9.00 4.81 1.87 1.16 1.51 1.61	3.55 13.18 11.42 10.45 11.20 5.42 1.83 .93 1.70	3.74 12.30 10.38 10.27 9.02 5.24 2.17 1.10 1.14 1.43	3.71 13.03 10.21 10.71 9.97 5.61 1.92 1.48 1.38 1.21	4.46 16.93 11.03 11.47 11.56 5.46 1.87 2.02 1.07	3.26 12.89 10.18 11.58 10.08 5.98 1.68 .76 1.11 1.33	14.19 10.22 11.58 10.53 6.32 1.86 1.47
Digestive and intestinal diseases, Renal and cystic diseases. Violent deaths. Cancer Typhoid fever Scarlet fever. Puerperal Whooping cough Malarial fever.	7.83 8.91 9.92 9.55 4.83 2.70 1.15 1.57 1.81	5.24	8.38 10.37 9.29 5.10 2.62 1.01 1.44 1.51	4.87 9.47 10.90 9.00 4.81 1.87 1.16 1.51 1.61	3.55 13.18 11.42 10.45 11.20 5.42 1.83 .93 1.70 .82	3.74 12.30 10.38 10.27 9.02 5.24 2.17 1.10 1.14 1.43	3.71 13.03 10.21 10.71 9.97 5.61 1.92 1.48 1.38 1.21	4.46 16.93 11.03 11.47 11.56 5.46 1.87 2.02 1.07 .60	3.26 12.89 10.18 11.58 10.08 5.98 1.68 1.11 1.33	14.19 10.22 11.58 10.53 6.32 1.86 1.47
Digestive and intestinal diseases, Renal and cystic diseases. Violent deaths. Cancer Typhoid fever. Scarlet fever. Puerperal Whooping cough. Malarial fever. Measles Erysipelas.	7.83 8.91 9.92 9.55 4.83 2.70 1.15 1.57 1.81 1.74	5.24	8.38 10.37 9.29 5.10 2.62 1.01 1.44 1.51 .52	4.87 9.47 10.90 9.00 4.81 1.87 1.16 1.51 1.61 .40 1.21	3.55 13.18 11.42 10.45 11.20 5.42 1.83 .93 1.70 .82 .26	3.74 12.30 10.38 10.27 9.02 5.24 2.17 1.10 1.14 1.48 .18 1.04	3.71 13.03 10.21 10.71 9.97 5.61 1.92 1.48 1.38 1.21 .20	4.46 16.93 11.03 11.47 11.56 5.46 1.87 2.02 1.07 .60 .23	3.26 12.89 10.18 11.58 10.08 5.98 1.68 1.11 1.33 .10	14.19 10.22 11.58 10.53 6.32 1.86 1.47 1.77
Pneumonia* Digestive and intestinal diseases, Renal and cystic diseases. Violent deaths. Cancer. Typhoid fever. Scarlet fever. Puerperal. Whooping cough. Malarial fever. Mesales. Erysipelas. Acute rheumatism. Small-pox	7.83 8.91 9.92 9.55 4.83 2.70 1.15 1.57 1.81 1.74 .88 .38	5.24	8.38 10.37 9.29 5.10 2.62 1.01 1.44 1.51	4.87 9.47 10.90 9.00 4.81 1.87 1.16 1.51 1.61	3.55 13.18 11.42 10.45 11.20 5.42 1.83 .93 1.70 .82	3.74 12.30 10.38 10.27 9.02 5.24 2.17 1.10 1.14 1.43	3.71 13.03 10.21 10.71 9.97 5.61 1.92 1.48 1.38 1.21	4.46 16.93 11.03 11.47 11.56 5.46 1.87 2.02 1.07 .60	3.26 12.89 10.18 11.58 10.08 5.98 1.68 .76 1.11 1.33 .10 .46 .42 .47	14.19 10.22

<sup>\*</sup>Deaths under this classification were not separately recorded until 1901.

TABLE 8.—SHOWING DEATH-RATE, PER 1,000 POPULATION, IN THE CITIES OF NEW JERSEY HAVING OVER 5,000 POPULATION, FOR TWENTY-EIGHT YEARS, 1879-1906.

NAMES OF CITIES.	1879.	1880.	1881.	1 <b>8</b> 82.	1883.	1884.	1885.	1886.	1887.
Atlantic City*Bordentown			24.46	81.76	26.29	82.50	28.54	21.03	27.20
Bordentown	16.82	16.89	16.31	16.88	16.87	19.68	15.88	15.88	13.32
Burlington	21.10	15.61	18.37	22.94	18.51	18.93	24.45	21.46	17.30
Camden	18.88	19.27	22.90	24.55	20.01	22.37		19.27	20.49
Gloucester	14.10	15.70	20.19	18.32	21.88	21.69	15.42	16.59	22.96
Bridgeton		17.75		23.85		18.69		11.92	
Millville			22.71	17.75	18.27	18.54			
Newark	25.26		21.12			24.70			
Orange	19.88	16.35		25.44		22.03	19.70		
OrangeBayonne.	26 73	15.04		26.89	20.91	22.19	18.58		
Harrison		28.41	20.00	24.61	22.18	32.08	28.96		
Hoboken	27 01		25.82	31.42		22.19			
Iersey City	28.04	20.98		30.12		25.15	22.42	22.02	
Jersey City Town of Union		20.04				23.42			
Tranton	26.08	20.68		20.53		21.13			
Trenton New Brunswick	10.50	15.66		22.78		28.18			
Porth Ambou	15.00	10.00	10.01					19.17	23.77
Perth Amboy			•••••			•••••	•••••	12.84	
Long Branch*	16 40	10 71	15 04	17.70	28.96	20.77	14.61	13.70	
Passaic	10.40	21.78	19.44	22.82		23.58			
Paterson	OE 61	23.07		29.61	27.72	28.33			
Calena	20.01	15.02			23.14	15.43			
Salem	10.00	10.02		21.68	24.30	20.93		18.90	
Elizabeth	10.20	15.58							
Plainfield Rahway	10.01	12.06		18.58	19.81	16.25	15.82		
Kanway	24.31	17.97		28.35		17.19			
Phillipsburg	14.08	17.54	15.87	23.53	20.46	18.10	18.37	14.40	19.24

									_
NAMES OF CITIES.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.
Atlantic City*	29.34	26.93	20.01	20.46	20.19	16.47 20.71	18.38 13.50		18.78 11.54
Bordentown	16.56	15.02	18.43				14.91	15.65	18.07
Burlington	21.46	20.13							19.2
Camden	22.79	18.73							19.9
Gloucester	23.13	21.82							28.13
Bridgeton	17.69	14.81	17.70						14.4
Bridgeton	21.65	13.43	19.48	16.51	16.62	15.23	13.79	17.01	15.34
Montelair									13.90
Newark	27.02	25.59							
Orange	24.49	22.85	24.50	20.29	23.31	20.38		18.69	19.8
Bayonne	26.38	24.24	20.37	20.37				22.51	20.5
Harrison	28.50	26.65	27.67	31.70					
Hoboken	28.13	25.57	25.62						
Jersey City Town of Union	25.93	22.66	25.96						
Town of Union	24.77	19.74	22.42						
Trenton	19.51	14.94	17.35	15.51					
New Brunswick	19.28	20.18		17.51					
Perth Ambov	27.41	24.76	17.41	23.05	22.61	19.71			
Long Branch*	20.04	12.41	14.66	12.16					
Morristown	18.95	24.32	19.91	16.55	20.80	18.55			
Passaic	24.38	24.86							
Paterson	27.17	23.02					20.31		
Salem		18.18	17.60	16.86	19.58	17.42	20.49	16.69	16.7
Elizabeth		20.18	19.30						
Plainfield	22.31	16.97	16.89	16.87					
Rahway	20.41	19.20				23.87			17.1
Phillipsburg	13.28	15.98				14.29	13.50	20.71	14.7

<sup>\*</sup>The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

TABLE 8.—SHOWING DEATH-RATE, PER 1,000 POPULATION, IN THE CITIES OF NEW JERSEY HAVING OVER 5,000 POPULATION, FOR TWENTY-EIGHT YEARS, 1879-1906—(Continued).

NAMES OF CITIES.	1897.	1898.	1899.	1900.	1901.	1902.	·19 <b>03</b> .	1904.	1905.	1906.	Aver. for 28 years.
Atlantic City*	20.45	16.89	19.08	17.85	10.85	16.28	15.88		16.79		
Englewood			17.57	17.75	15.74	16.45	15.86		14.90		
Hackensack			14.94	13.66		18.34	16.39	13.78	17.48		·
Bordentown	14.78	18.17		19.46	16.55	17.27		19.71	18.26	17.19	17.45
Burlington	18.20	14.28		24.76		21.28	22.46	22.82	16.67	17.87	20.01
Camden	20.71	17.82	19.85	14.11	17.56	16.90	16.05	18.01	16.17	18.44	20.12
Gloucester	20.01	18.31	19.50	19.88 14.88	11.27 13.32	21.08 13.89	17.89 13.78	17.82	18.37 14.09	18.44 14.31	20.08 16.14
Gloucester Bridgeton Millville	10.02	13.10 12.38	13.74 13.38	15.78	14.61	16.27	14.13	16.66 16.67	18.72	13.67	16.35
Bloomfield	9.07	12.30		10.70	14.55	18.50	11.21	14.64	11.40	14.09	10.30
East Orange				10.97	9.71	10.94	9.72	12.11	10.72	10.38	••••••
Invington			•••••	10.51	9.24	14.66	12.86	10.67	12.58	13.85	
Irvington Montclair	10 63	11 76	18 00	15.11		14.48		20.28	18.02	15.49	
Newark	19.60	16.65	19.40	19.60		18.71	18.47		17.45	19.08	22.38
Newark Orange	16.50	19.08	18.19	20.68	17.45	20.26	20.40	21.85	20.46		20.47
West Orange					13.25	10.27	10.52	11.02	13.59	10.66	
Bayonne	21.80	25.00	25.59	17.39	16.38	15.32	18.44	16.60	15.76	17.18	20.65
Harrison	1 18.61	28.77		22.37	21.24	19.33		16.69	18.87	17.56	
Hoboken Jersey City	21.94	18.06		23.01	18.67	18.60	17.70	22.33	21.11	21.46	
Jersey City	19.60	19.16	19.78	20.34	19.12	18.65		20.85	18.88	19.36	
Kearny						17.45		23.70	17.20	17.54	
Town of Union						16.39		17.76	12.94		
West Hoboken						12.95	11,76	14.48	14.87		
West New York		15.45			10.05	14.85		16.14	15.42	13.72	
Trenton				16.42 21.29		17.19 20.00	18.30 19.43	$\frac{18.09}{22.16}$	17.63 19.66	17.28 17.76	17.98 19.39
New Brunswick	17.00	14.70	16.04 16.16	14.46		14.82	12.70	14.39	12.20		
Courth Ambor	17.11	19.90	12.65	13.86		19.52	15.68	16.06	19.97		
Perth Amboy South Amboy Long Branch*	14 11	18 19	17.51	18.15		21.50	20.21	22.37	21.51		
Red Bank	14.11	10.10	17.01	10.10	16.44	12.58	12.52	15.87	15.97		
Dover	19.12	15.78	14.34	12.46		15.39	13.87	14.09	15.58		
Morristown	16.16		19.18	16.38		16.64		18.84	20.42	21.10	18.59
Passaic	24.29							18.52	18.29		
Paterson	18.71		19.65	18.70		16.37		17.84	16.51	17.66	
Salem	16.65			20.13	14.11	16.00	17.21	20.31	16.92	16.90	
North Plainfield		l		l	12.40			11.57	17.27	9.59	
Elizabeth	17.16	15.50		17.69				18.72	15.63		
Plainfield	15.91		15.72	16.01	16.36			16.89	15.70		
Rahway	16.06	14.30	16.67	15.50	14.87	17.52		18.99	13.64		
Summit	1		! <u></u>		14.62	11.81		13.08	12.27	14.12	
Philipsburg	1 16.75	18.40	13.68	12.13	14.34	10.04	13.44	15.52	10.03	1 11.49	15.84

<sup>\*\*</sup>The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

CHART SHOWING RELATIVE MORTALITY IN CERTAIN CITIES OF NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1906.

East Orange	Population, 25,909. Deaths, 269. Rate per 1,000, 10.38.
West Hoboken	Population, 30,280. Deaths, 385. Rate per 1,000, 12.71.
Perth Amboy	- · · · · · · · · · · · · · · · · · · ·
Millville	
Bloomfield	Population, 12,144. Deaths, 166. Rate per 1,000, 13.67.
Bridgeton	Population, 12,068. Deaths, 170. Rate per 1,000, 14.09.
Montclair	Population, 13,624. Deaths, 195. Rate per 1,000, 14.31.
Plainfield	Population, 16,852. Deaths, 261. Rate per 1,000, 15.49.
	Population, 19,088. Deaths, 304. Rate per 1,000, 15.93.
Passaic City	Population, 39,849. Deaths, 658. Rate per 1,000, 16.39.
Town of Union	Population, 17,869. Deaths, 287. Rate per 1,000, 16.52.
Hackensack	Population, 11,429. Deaths, 193. Rate per 1,000, 16.89.
Bayonne	Population, 44,170. Deaths, 759. Rate per 1,000, 17.18.
Trenton	Population, 86,355. Deaths, 1,493. Rate per 1,000, 17.29.
Hoboken	Population, 66,689. Deaths, 1,431. Rate per 1,000, 17.46.
Kearny	Population, 14,142. Deaths, 248. Rate per 1,000, 17.54.
Harrison	,
Elizabeth	
· Paterson	Population, 62,185. Deaths, 1,097. Rate per 1,000, 17.64.
New Brunswick	Population, 112,801. Deaths, 1,992. Rate per 1,000, 17.66.
*Atlantic City	Population, 23,758. Deaths, 422. Rate per 1,000, 17.76.
*Long Branch	Population, 39,544. Deaths, 710. Rate per 1,000, 17.95.
_	Population, 12,845. Deaths, 238. Rate per 1,000, 18.14.
Camden City	Population, 84,849. Deaths, 1,565. Rate per 1,000, 18.44.
Newark	Population, 290,733. Deaths, 5,547. Rate per 1,000, 19.08.
Jersey City	Population, 237,952. Deaths, 4,607. Rate per 1,000, 19.36.
Orange	Population, 26,498. Deaths, 539. Rate per 1,000, 20.34.
Morristown	Population, 12,322. Deaths, 260. Rate per 1,000, 21.10.
	· · · · · · · · · · · · · · · · · ·

<sup>\*</sup>The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

TABLE 9.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FOR THE YEAR END-ING DECEMBER 31, 1906, FROM TEN SELECTED PREVENTABLE DISEASES, WITH PERCENTAGE OF TOTAL MORTALITY.

NAME OF DISEASE.	Deaths.	Percentage of total mortality.
Consumption	3,654	10.24
Pneumonia	3,117	8.74
Diarrhœal diseases of children	2,397	6.72
Diphtheria	673	1.89
Typhoid fever	<b>40</b> 8	1 14
Whooping cough	388	1.09
Measles	203	.57
Scarlet fever	193	.54
Malarial fever	36	.10
Small-pox	1	l

TABLE 10.—SHOWING DEATHS FROM CERTAIN SELECTED CAUSES OF DEATH, PER 10,000 INHABITANTS, FOR THE YEARS ENDING DECEMBER 31, 1905, AND DECEMBER 31, 1906, ALSO SHOWING AVERAGE NUMBER OF DEATHS FROM SAID DIREASES DURING PAST TWENTY-EIGHT YEARS.

diseases,	Average number of deaths for twenty-eight years.	Deaths per 10,000 inhabitants during year ending December 31st, 1905.	Deaths per 10,000 inhabitants during year ending December 31st, 1906.
Consumption	3,365	16.73	16.64
Diarrhœal diseases of children	2,911	10.68	10.91
Pneumonia*	•	12.89	14.19
Diseases of heart and circulation	2,123	15.47	15.75
Digestive and intestinal diseases	1,444	20.86	10.22
Diphtheria and croup		3.26	3.06
Renal and cystic diseases	1,391	11.58	11.58
Violent deaths	1,276	10.08	10.53
Cancer		5.98	6.32
Typhoid fever	520	1.68	1 86
Scarlet fever	413	.76	.88
Pnerperal	263	1.11	1.47
Whooping cough	234	1.33	1.77
Malarial fever	173	.10	.16
Measles		.46	.92
Erysipelas		.42	.43
Acute rheumatism	80	.47	.50
Small-pox	49	•••••	• • • • • • • • • • • • • • • • • • • •

<sup>\*</sup> Deaths from pneumonia were not separately recorded until the year 1901.

TABLE 11.—SHOWING MORTALITY IN NEW JERSEY, FROM CERTAIN SELECTED CAUSES OF DEATH, FOR THE YEAR ENDING DECEMBER 31, 1906, COMPARED WITH DEATHS FOR THE PREVIOUS YEAR.

SELECTED DISEASES.	Deaths for year ending De- cember 31st, 1905.	Deaths for year ending De- cember 31st, 1906.	Com- parative mortality.
Consumption	3,587	3,654	+ 67
Diseases of heart and circulation	3,316	3,460	+ 44
Renal and cystic diseases	2,487	2,543	<b>∔</b> 56
Digestive and intestinal diseases	2,183	2,245	+52
Diarrheal diseases of children	2,290	2,397	∔107
Cancer	1,282	1,389	∔107
Diphtheria	699	673	<u> </u>
Typhoid fever	360	408	+48
Scarlet fever	164	193	+ 29
Puerperal	238	<b>322</b>	+ 84
Whooping cough	186	388	<b>∔202</b>
Erysipelas	90	94	+ 4
Acute rheumatism	101	109	+ 4 + 8
Measles	98	203	+105
Malarial fever	21	36	+ 15
Small-pox.	1	1	_ 0

CHART SHOWING DEATHS IN NEW JERSEY, FROM CERTAIN SPECIFIED DISEASES, FOR THE PAST TWENTY-EIGHT YEARS, ARRANGED IN ORDER OF GREATEST FREQUENCY.

DISEASES	NUMBER OF DEATHS		10,000	20000	30,000	40000	20000	60,000	70,000	90,000	90,000	000'001
CONSUMPTION	94227	-										
DIARRHOEAL DISEASES = CHILDREN	81502											
DISEASES OF HEART & CIRCULATION	59449											
DIGESTIVE & INTESTINAL DISEASES	40428								•			
REMALECYSTIC- DISEASES	38948					_						
VIOLENT DEATHS	35728					-						
DIPHTHERIALCROUP	34540											
CANCER	20951											
TYPHOID FEVER	14566		—									
SCARLET FEVER	11559										•	
PUERPERAL FEVER	7348		•									
WHOOPING COUGH	6565											
MALARIAL FEVER	4837	<b>—</b>										
MEASLES	4371	<u> </u>										
ERYSIPELAS	2545	<b>—</b>										
ACUTE RHEUMATISM	2235	-										
SMALL POX	1358											

Consumption.—The number of deaths caused by pulmonary tuberculosis during the year ending December 31st, 1906, was 3,654, or 16.64 per 10,000 inhabitants. Reference to the accompanying chart and tables will show that the mortality in New Jersey due to this affection has varied but little during the past ten years, the average number of deaths from this affection which have annually occurred during that period having been 17.46 per 10,000 population, but comparison of these figures with those of the eighteen preceding years (1879-1896) shows a continuous and very marked decrease in the deaths from this cause. spections of the dwellings in which persons who acquire pulmonary tuberculosis live suggest that the prevalence of this disease is not so much dependent upon the density of the population as it is upon the condition of the interior of the dwelling apartments, and it has been found that in many thickly populated localities the occurrence of consumption is less per capita than in certain rural situations where the occupants of buildings shut out light and air, and maintain uncleanly conditions inside of the house, and it therefore is essential, in the effort to restrict the spread of this disease, that the interior of dwellings shall be given close attention by the sanitary authority, and that local ordinances shall be adapted to the enforcement, where necessary, of more enlightened modes of living. The instruction furnished by visiting nurses or by female inspectors promises excellent results in dealing with the foreign-born population, by directing attention to the dangers to health which attend the exclusion of the outer air from sleeping-rooms, the defilement of floors and sidewalls with expectorated matter, the use of unclean drinking-cups, &c.

TABLE 12.—DEATHS FROM CONSUMPTION IN NEW JERSEY, BY AGE PERIODS, FOR SIX YEARS.

	ļ 				AG	E PERI	ods.					
YEARS.	Under 1 year.	1 to 10.	10 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	Over 80.	Not stated.	Totals.
1901	39	73	241	937	827	510	319	199	87	25		3,257
1902	39	62	227	842	759	504	281	199	76	19	7	3,015
1903	49	81	285	941	877	534	810	191	95	16	1	3,380
1904	67	80	315	983	1,005	575	337	217	78	11	2	3,670
1905	40	89	309	972	915	606	885	197	100	23	1	3,587
1906	62	98	309	958	942	646	339	199	84	<b>26</b> Digitize	t by CI	3,654
Totals	296	478	1,686	5,628	5,325	3,375	1,921	1,202	520	120	12	20,568

TABLE 13.—SHOWING NUMBER OF DEATHS AND DEATHS PER 10,000 POPULATION FROM CONSUMPTION IN NEW JERSEY, AND THE PROPORTION OF DEATHS FROM CONSUMPTION TO TOTAL DEATHS DURING TWENTY-EIGHT YEARS.

YEARS.	Population.*	Total deaths in New Jersey.	Deaths from consumption.	Proportion of deaths from con- sumption to total deaths.	Deaths from consumption per 10,000 population.
1879	1,020,584	20,444	2,788	13,64	27.32
1880	1,130,892	18,967	2,714	14.30	24.00
1881	1,160,275	20,810	2,989	14.36	25.76
1882	1,189,658	25,910	3,475	13.41	29.21
1883	1,209,048	23,310	3,121	13.39	25.81
1884	1,248,224	21,716	3,215	14.80	25.76
1885	1,278,033	23,807	3,320	13.94	25.19
1886	1,310,431	22,734	3,205	14.10	24.46
1887	1,342,829	24,331	3,653	15.01	27.20
1888	1,375,227	27,173	3,358	12.44	24.42
1889	1,407,625	26,543	3,449	12.99	24.50
1890	1,441,017	28,530 ·	3,669	12.96	25.46
1891	1,478,784	28,840	3,456	11.98	23.37
1892	1,511,653	32,685	3,575	10.94	<b>23 6</b> 5
1893	1,538,799	30,596	3,429	11.21	22.28
1894	1,578,373	30,004	3,433	11.44	21.75
1895	1,672,942	30,634	3,542	11.56	21.17
1896	1,718,543	30,767	3,358	10.92	19.54
1897	1,764,144	29,822	3,237	10.85	18.35
1898	1,810,008	27,337	3,225	11.79	17.82
1899	1,855,872	30,999	3,584	11.56	19.31
1900	1,883,669	31,474	3,514	11.17	18.64
1901	1,925,781	31,739	3,257	10.26	16.91
1902	1,967,893	33,655	3,015	8.96	15.32
1903	2,016,797	31,820	3,380	10.62	16.76
1904	2,058,909	35,298	3,670	10.40	17 83
1905	2,144,143	33,864	3,587	10.59	16.73
1906	<b>2,</b> 196, <b>23</b> 8	35,670	3,654	10.24	16.64

<sup>\*</sup> Estimated except for census years.

TABLE 14.—SHOWING MORTALITY RATES FROM ALL CAUSES AND FROM GONSUMP-TION ONLY, IN MUNICIPALITIES HAVING 5,000 INHABITANTS OR OVER, FOR THE YEAR ENDING DECEMBER 31, 1906, PER 10,000 POPULATION.

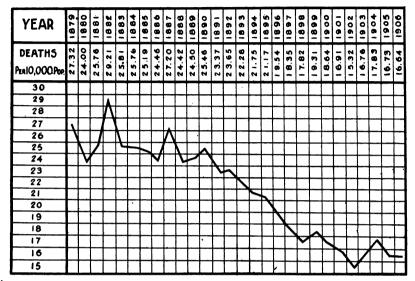
	Deaths from all causes per 10,000 popu- lation.	Deaths from consumption per 10,000 population.
Atlantic County	163.1	11 10
Atlantic City	179.5	11.18 11.89
Bergen County.	129.3	11.12
Englewood	170.8	10.90
Hackensack	168.9	19.25
Burlington County	153.5	10.35
Bordentown	171.9	12.28
Burlington	178.7	7.85
Camden County	172.4	17.13
Camden City	184.4	18.03
Gloucester City	184.4	13.26
Cape May County	129.5	7.13
Cumberland County	128.1	12.81
Bridgeton	143.1 136.7	16.15 14.86
Essex County	136.7 175.6	14.86 21.88
Bloomfield	140.9	15.74
East Orange	103.8	9.65
Irvington	133.5	17.18
Montelair	154.9	16.02
Newark	190.8	24.04
Orange.	203.4	26.80
West Orange.	106.6	19.83
Gloucester County	132.3	12.86
Hudson County	186.4	20.64
Bayonne	171.8	17.89
Harrison	175.6	20.35
Hoboken	214.6	23.09
Jersey City	193.6	22.74
Kearny	175.4	14.85
Town of Union	165.2	16.12
West Hoboken	127.1 137.2	12.88
Hunterdon County.	145.2	14.51 11.73
Mercer County	160.3	14.88
Trenton	172.8	17.25
Middlesex County	143.9	11.24
New Brunswick	177.6	18.52
Perth Amboy	128.9	9.44
South Amboy	218.9	11.19
Monmouth County	137.5	12.57
Long Branch.	181.5	17.91
Red Bank	143.1	26.45
Morris County	161.6	13.43
Dover	111.9	10.88
Morristown	211.0 125.6	16.23
Passaic County	163.0	18.74 17.00
Passaic City	163.9	15.56
Paterson	176.6	19.86
Salem County.	132.0	15.89
Salem City	169.0	25.88
Somerset County	125.7	10.02
North Plainfield	95.9	10.46
Sussex County	138.0	11.15
Union County	153.2	15.07
Elizabeth	176.4	19.30
Plainfield	159.3	13.10
Rahway	125.1	15.92
Summit	141.2	16.77
Warren County	131.9	10.75
Phillipsburg	114.9	8.56

Note.—The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

TABLE 15.—SHOWING AVERAGE ANNUAL DEATH-RATES FROM ALL CAUSES AND AVERAGE ANNUAL DEATH-RATES FROM CONSUMPTION IN NEW JERSEY FOR TWENTY-EIGHT YEARS, BY COUNTIES, COMPARED WITH DEATH-RATES FROM ALL CAUSES AND DEATH-RATES FROM CONSUMPTION, FOR THE YEAR ENDING DECEMBER 31, 1906, PER 10,000 POPULATION.

		AVERAGES P		
COUNTIES.	Average annual death-rate from all causes per 10,000 population for twenty-eight years.	Average annual death-rate from consumption per 10,000 population for twenty-eight years.	Death-rate per 10,000 population from all causes for year ending Dec. 31, 1906.	Death-rate from con- sumption per 10,000 population for year end- ing Dec. 31, 1906.
Atlantic County	173.6	18.10	165.1	11.19
Bergen County	85.2	15.08	129.3	11.12
Burlington County	153.7	18.38	153.5	10.35
Camden County	191.0	23.09	172.4	17.13
Cape May County	143.1	14.88	129.5	7.13
Cumberland County	67.8	20.16	128.1	12.81
Essex County	196.7	27.01	175.6	21.88
Gloucester County	146.8	17.88	132.3	12.86
Hudson County	220.4	26.50	186.4	20.64
Hunterdon County	134.8	14.70	145.2	11.73
Mercer County	175.4	23.10	160.3	14.88
Middlesex County	164.4	17.68	144.0	11.24
Monmouth County	152.4	17.14	137.5	12.57
Morris County	94.7	20.62	161.6	13.43
Ocean County	145.2	20.83	125.6	13.64
Passaic County	190.0	22.78	163.5	17.00
Salem County	147.6	19.29	132.0	15.89
Somerset County	145.1	16.60	125.6	10.02
Sussex County	123.1	15.11	137.2	11.15
Union County	131.8	15.53	153 2	15.07
Warren County	147.3	15.45	131.9	10.75
The State	177.7	21.75	162.4	16.64

CHART SHOWING DEATHS FROM CONSUMPTION IN NEW JERSEY, PER 10,000 POPULATION, FOR THE TWENTY-EIGHT YEARS ENDING DECEMBER 31, 1906.



Pneumonia.—During the past six years the number of deaths certified as having been caused by pneumonia has been as follows: 1901, 3,257; 1902, 3,015; 1903, 3,380; 1904, 3,670; 1905, 2,764; 1906, 3,117, and the average number of deaths during this period per 10,000 inhabitants recorded from this cause has been 3,200.

TABLE 16.—SHOWING DEATHS IN NEW JERSEY FROM PREUMONIA, WITH AGE AT DEATH, FOR THE YEAR ENDING DECEMBER 31, 1906.

		AGE PERIODS.																		
DEATHS FROM PNEUMONIA.	Under 1 mo.	Under 1 year.	1 to 5.	5 to 10.	to	15 to 20.	to	25 to 30.	30 to 35.	to	40 to 45.	45 to 50.	to	55 to 60.	60 to 70.	70 to 80.	80 to 90.	Over 90.	Not stated.	Total.
	85	522	559	64	38	51	78	109	125	150	137	111	146	168	847	267	141	19		8,117

TABLE 17.—SHOWING DEATHS FROM PNEUMONIA IN CITIES OF OVER 5,000 INHABITANTS, IN NEW JERSEY, BY MONTHS, FOR THE FOUR YEARS ENDING DECEMBER 31, 1906, AND DEATH-RATES PER 10,000 INHABITANTS, FOR EACH OF SAID YEARS.

	Estimated population of cities of over 5,000 inhabitants.		MONTHS.												Death-rate	
YEARS.		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Bept.	Oct.	Nov.	Dec.	Totals.	per 10,000 inhab- itants.	
1903	1,363,464	271	288	261	128	155	67	98	58	75	91	202	278	1,972	14.46	
1904	1,370,719	401	350	394	315	241	134	42	51	72	108	187	289	2,584	18.85	
1905	1,429,100	309	271	251	190	178	96	75	73	69	121	199	209	2,041	14.28	
1906	1,505,142	<b>34</b> 0	286	341	175	189	86	80	69	89	127	178	285	2,245	14.92	
Totals		1321	 1195	1247	808	763	383	295	251	<b>305</b>	447	766	1061	8,842		

TABLE 18.—SHOWING DEATHS AND DEATH-RATES FROM PNEUMONIA IN NEW JERSEY FOR SIX YEARS, 1901-1906.

YEARS.	Deaths from pneumonia.	Deaths from pneumonia per 10,000 inhab- itants.
1901	2,539	13.18
1902	2,421	12.30
1903	. 2,628	13.03
1904	3,486	16.93
1905	2,764	12.89
1906	3,117	14.19

Deaths Among Children.—The comparatively low death-rate among children under five years of age which prevailed in New Jersey during the preceding eight years was again recorded during the year ending December 31st, 1906, the average number of deaths per 10,000 population for these years (1898-1906) having been 51.62, while the average for the previous nineteen years (1879-1897) was 71.69, thus unmistakably showing the great saving of child life which has occurred in recent years. There appears to be no reason to doubt the correctness of the view heretofore expressed in these reports indicating that the

remarkable decrease in the mortality among young children which has occurred during the past few years has been almost entirely due to the employment of the more cleanly methods which have been introduced concerning the collection, handling, cooling and feeding of milk, and when we consider that thus far only a very small proportion of dairymen and dealers in milk have adopted modern methods for the protection of the milk from contamination, and that quite as small a proportion of mothers and nurses have adhered to the essential requirements for the proper safeguarding and preparation of the milk after it is delivered by the dealer, we may reasonably expect further reductions in infant mortality, and this decrease promises to bear a close relation to the degree of progress and efficiency which may be developed among the local sanitary authorities throughout the State. The medical advisers will continue to insist upon the importance of cleanliness in caring for the milk after it reaches the nursery, but only the well-informed and conscientious sanitary inspector can enforce the measures which are necessary to insure the milk against careless or negligent handling before it reaches the consumer.

TABLE 19.—SHOWING NUMBER OF DEATHS IN NEW JERSEY; DEATHS AMONG CHILDREN UNDER FIVE YEARS OF AGE; DEATHS UNDER FIVE YEARS FROM DIARRHEAL DISEASES, AND DEATHS UNDER FIVE YEARS PER 10,000 INHABITANTS, FOR THE SIX YEARS ENDING DECEMBER 31, 1906.

	NEW JERSEY.								
DEATHS.		1902.	1903.	1904.	1905.	1906.			
Total deaths	31,739	31,319	31,820	85,298	33,864	35,670			
	9,549	9,802	9,950	10,913	9,864	11,246			
	1,787	1,857	1,608	2,354	2,290	2,365			
deaths.  Deaths under five years per 10,000 population	30.09	31.30	31.27	30.92	29.13	31.53			
	49.59	49.81	44.34	53.00	46.00	51.21			

TABLE 20.—SHOWING DEATHS AMONG CHILDREN UNDER FIVE YEARS OF AGE IN NEW JERSEY PER 10,000 POPULATION, FOR TWENTY-RIGHT YEARS.

YEARS.	Deaths under 1 year per 10,000 popula- tion.	Deaths from 1 to 5 years per 10,000 popula- tion.	YEARS.	Deaths under 1 year per 10,000 popula- tion.	Deaths from 1 to 5 years per 10,000 popula- tion.
1879	45.58	33.97	1893	49.22	24 26
	40.38		1894		
1880		25.12		49.75	22.97
1881	39.90	25.75	1895	45.67	21.79
1882	<b>49</b> 88	38.48	[1896	43.99	24.43
1883	<b>44.4</b> 8	28.22	1897	40.16	20.00
1884	41.04	22.82	1898	35.91	15.83
1885	44.69	26.67	1899	38.22	17.04
1886	41.31	23.83	1900	37.05	18.44
1887	43.56	25.29	1901	36.11	13.48
1888	47.51	28.90	1902	36.18	13.63
1889			1903		
	48.61	24.95		37.08	15.38
1890	49.38	25.38	1904	36.18	16.82
1891	46.90	<b>25.36</b>	1905	32.42	13 59
1892	52.74 <sup>/</sup>	29 08	1906	35.39	15.81

TABLE 21.—SHOWING DEATHS IN NEW JERSEY FROM DIARRHCEAL DISEASES OF CHILDREN, WITH AGES AT DEATH, COMPARED WITH DEATHS FROM ALL CAUSES AMONG CHILDREN UNDER FIVE YEARS OF AGE, FOR YEAR ENDING DECEMBER 31, 1906.

AGE PERIODS,	Deaths from diarrhœal diseases.	Deaths from all causes among children under five years of age.
Under one month	176 1,740 449	2,545 5,228 3,473
Total	2,365	11,246

TABLE 22.—SHOWING TOTAL DEATHS, DEATHS UNDER FIVE YEARS, PERCENTAGE OF DEATHS UNDER FIVE YEARS TO TOTAL DEATHS, AND DEATHS UNDER FIVE YEARS PER 10,000 INHABITANTS, FOR THE CITIES OF NEW JERSEY HAVING OVER 5,000 POPULATION, FOR THE SIX YEARS ENDING DECEMBER 31, 1906.

								1	1				
		190	01.			190	)2.			190	3.		
NAME OF PLACE.	Total deaths.	Deaths under five years.	Percentage of deaths under five years to total deaths.	Deaths under five years per 10,000 population.	Total deaths.	Deaths under five years.	Percentage of deaths under five years to total deaths.	Deaths under five years per 10,000 population.	Total deaths.	Deaths under five years.	Percentage of deaths under five years to total deaths.	Deaths under five years per 10,000 population.	
Atlantic City Bayonne Bloomfield Bridgeton Burlington Camden Dover East Orange Elizabeth Englewood Gloucester City Hackensack Harrison Hoboken Irvington Jersey City Kearny Long Branch Millville Montclair Morristown Newark New Brunswick North Plainfield Orange Passalc City Paterson	549 578 1457 146 1,877 986 216 966 101 1158 173 229 1,128 4,038 221 1155 243 241 24,826 364 426 426 1,871	148 259 311 42 523 311 57 380 27 27 380 881 861 1,426 55 59 99 1,513 87 136 297 627	26.96 44.81 21.365 28.77 37.98 34.52 26.73 24.68 34.52 26.73 24.68 32.97 35.37 32.09 26.70 25.81 40.74 81.85 23.93 31.92 54.80 33.95	49.76 49.76 49.78 88.81 56.82 56.82 66.68 66.68 66.68 66.68 66.68 67.53 67.58 67	515 580 139 195 1,368 97 251 886 105 149 212 1,156 193 204 173 215 193 204 4,881 4,983 14,881 4,983 1,773	161 246 522 445 445 838 838 826 26 26 49 57 57 51 110 53 1,516 1111 121 183 311,616	81.26 42.41 87.41 23.59 27.74 82.58 84.08 21.91 88.99 24.76 32.89 80.15 35.12 29.55 25.58 25.59 25.59 25.08 35.58 27.58 36.60 67.17 35.76	50.885 54.96 50.508 32.48 358.17 54.98 552.35 523.98 58.79 39.51 69.14 55.36 66.04 43.32 49.73 55.78 54.57 74.09 74.15 56.39 74.15 58.51	510 679 119 202 166 1,281 90 233 984 107 129 176 210 1,140 213 198 4,150 213 198 4,901 4,901 4,901 525 650 1,780	130 270 36 40 407 448 811 57 816 22 22 41 48 76 849 127 69 1,886 125 125 125 125 125 125 125 125 125 125	25.49 39.76 30.250 19.80 28.31 34.97 24.46 38.88 38.88 38.27 27.27 36.28 30.61 20.73 32.06 20.19 21.21 82.24 46.86 82.27 82.28 82.27 82.28 82.27 82.28 82.27 82.28 82.28 82.29 82 82 82 82 82 82 82 82 82 82 82 82 82	39.07 73.31 33.92 27.29 68.58 56.18 47.78 47.78 55.99 32.62 56.87 44.70 54.46 67.41 54.46 26.67 35.70 42.88 55.26 61.29 51.69	
Perth Amboy. Philipsburg	308 152 257 118 91 82 105 80 275 1,234 337 77	158 35 58 20 31 21 88 29 95 840 21 21	49.68 23.03 22.57 16.97 34.07 25.61 86.19 86.25 34.55 41.54 37.66 22.84	82.11 34.16 36.90 25.20 56.00 36.14 58.42 58.00 61.07 45.06 60.08 54.71 29.59	290 157 256 139 71 98 130 67 261 1,384 824 79	162 36 62 33 24 28 41 28 409 118 35	55.86 22.98 24.22 23.91 33.80 24.78 81.54 84.83 34.10 80.66 86.87 44.30 26.67	82.79 34.48 38.59 41.59 42.52 39.58 61.55 40.48 52.69 47.18 65.80 27.39	256 161 263 123 72 100 110 83 266 1,405 812 65	119 45 76 29 15 21 86 18 75 859 96 21	46.48 27.95 28.90 23.58 20.83 21.00 82.73 15.66 28.20 25.55 80.77 82.31 18.99	59.04 37.58 45.79 36.55 26.08 36.14 51.31 22.36 45.32 46.77 36.18 38.71 19.97	

TABLE 22.—SHOWING TOTAL DEATHS, DEATHS UNDER FIVE YEARS, PERCENTAGE OF DEATHS UNDER FIVE YEARS TO TOTAL DEATHS, AND DEATHS UNDER FIVE YEARS PER 10,000 INHABITANTS, FOR THE CITIES OF NEW JERSEY HAVING OVER 5,000 POPULATION, FOR THE SIX YEARS ENDING DECEMBER 31, 1906—(Continued).

		190	)4.			190	)5.		1	19	06.	
NAME OF PLACE.	Total deaths.	Deaths under five years.	Percentage of deaths under five years to total deaths.	Deaths under five years per 10,000 population.	Total deaths.	Deaths under five years.	Percentage of deaths under five years to total deaths.	Deaths under five years per 10,000 population.	Total deaths.	Deaths under five years.	Percentage of deaths under five years to total deaths.	Deaths under five years per 10,000 population.
Atlantic City Bayonne Bloomfield	529 714 160	122 357 61	23.06 50.00 38.13	34.42 82.99 55.82	630 666 133	160 287 42	25.40 43.09 31.58	42.56 67.91 36.00	710 759 170	170 360 51	23.94 47.43 30.00	42.9 81.5 42.2
Bridgeton	240	51	21.25	35.39	192	45	23.44	33.03	195	44	22.56	32.3
Burlington	165	39	23.64	52,76	134	35	26,12	43.54	146	43	29.45	52.6
amden	1,547	539	34.84	66,61	1,347	412	30.59	49,42	1,565	566	36.17	66.7
Dover	94	23 72	24.47	34.48	99	30	30.30	47.22	72	29	40.27	45.0 25.0
East Orange	295 1.100	397	24.41 36.09	29.54 67.56	270 946	59 315	21.85	23.44 48.39	269 1,097	65 398	24.16 36.28	64.0
Englewood	130	34	26.15	49.21	118	27	22.88	34.08	141	39	27.66	47.2
Houcester City	127	44	34.65	60.01	148	56	37.84	69.52	153	56	36.60	67.4
Jackensack	154	34	22.08	30.43	194	49	25,26	44.15	193	61	31.61	53.3
Jarrison	196	67	34.18	59.10	242	100	41.32	77.98	233	95	40.77	71.6
Hoboken	1,420	456	32.11	71.71	1,382	384	27.79	58.65	1,431	440	30.75	65.9
rvington	72	20	27.77	29.63	90	1 406	28,89	36.21 61.28	101	1,538	21.78	29.0 64.6
cersey City	4,699	1,462	31.11 24.81	64.86 58.81	4,394	1,426	32.45	42.64	248	69	27.82	48.7
ong Branch	226	58	23,45	52.45	262	59	22.52	48.43	233	48	20.60	37.3
Millville	178	59	33.15	55.27	163	60	36.81	50.49	166	61	36.75	50.2
Iontelair	319	161	50.47	102.35	295	116	39,32	70.86	261	91	34.87	54.0
Iorristown	227	59	25,99	48.97	248	86	34.68	70.81	260	84	32.18	68.1
Newark	5,301	1,679	31 67	62.12	4,943	1,320	26.70	46.60	5,547	1,840	33.17	63.2
New Brunswick North Plainfield	445	163 15	36.63	81.17 26.69	434	144	30.87 45.36	62,25 78,35	422 55	164	$\frac{38.86}{27.36}$	22.6
range	551	163	29.58	64.63	534	172	32.21	65.90	539	166	30.79	62.6
assaic City	661	371		103.96	691	373	53.98	98.58	653	317	48.55	79.5
aterson	1,988	647	32.55	58,06	1,841	550	29,88	49,31	1,992	681	34.18	60.3
erth Amboy	294	125	42.52	61.17	316	156	49.37	60.24	355	190	53.52	69.0
hillipsburg	168	47	27.98	43.41	134	40	29.85	29.96	161	55	34.16	48.3
lainfield	283	75	36,61	44.75	289	67 18	23,18	36.28 20.81	304 110	85 15	27.96 $13.64$	17.0
Rahway	93	14 29	12.61 31.18	17.64 49.49	118	20	15.25	31.93	92	30	32.61	46.6
alem City	118	29	22.88	46.46	100	35	32.11	54.32	111	25	22.52	38.0
outh Amboy	112	45	40,18	64.53	125	42	33.60	67.11	137	49	35.77	78.3
ummit	78	17	21.79	28,41	84	23	27,47	33.60	101	19	18.81	26.
own of Union	296	91	30.74	54.60	220	81	36.82	47.63	287	87	30.31	50.0
renton	1,482	421	28.41	51.38	1,484	448	30.10	53.22	1,493	467	31.28	54.0
Vest Hoboken Vest New York	390 92	154 42	39,49	57.18 79.74	418 111	134 50	32,06 45.05	46.08	385 104	134	34.81	44.5 52.
Vest Orange	85	29	45.65 34.12	37.58	107	26	24.30	33.03	86	22	25.58	27.

TABLE 23.—SHOWING DEATHS IN CERTAIN CITIES OF NEW JERSEY, ALSO DEATHS AMONG CHILDREN UNDER FIVE YEARS OF AGE; DEATHS UNDER FIVE YEARS FROM DIARRHŒA, AND DEATHS UNDER FIVE YEARS PER 10,000 INHABITANTS.

	NEWARK.						JERSEY CITY.					
DEATHS.	1901.	1902.	1903.	1904.	1905.	1906.	1901.	1902.	1903.	1904.	1905.	1906.
Total deaths Deaths under five years Deaths under five years from	4826 1513		4901 1386		4948 1320		4038 1426					
diarrhœaPercentage of deaths under	431	216	199	324	325	330	213	270	242	<b>81</b> 5	315	354
five years to total deaths Deaths under five years per	32.27					33.17				ł		33.38
10,000 population	59.06	58.72	52.22	62.12	46.60	68.29	67.53	66.78	60.37	64.85	61.28	64.68

	PATERSON.						CAMDEN.					
DEATHS.	1901.	1902.	1903.	1904.	1905.	1906.	1901.	1902.	1903.	1904.	1905.	1906.
Total deaths Deaths under five years Deaths under five years from					1841 550		1377 523	1368 445				1565 566
diarrhœaPercentage of deaths under	246	112	91	152	144	130	155	58	63	102	83	89
five years to total deaths Deaths under five years per	35.08	ì		1		i I	38.13 66.56					ĺ

			ново	KEN.		TRENTON.						
DEATHS,	1901.	1902.	1903.	1904.	1905.	1906.	1901.	1902.	1903.	1904.	1905.	1906.
Total deaths Deaths under five years			1140 349				1234 340					
Deaths under five years from diarrhœa Percentage of deaths under	125	-	-		1		73	92	85	69	99	108
five years to total deaths Deaths under five years per	82.22		i		ł	l	27.55 45.05				1	31.28 54.08

TABLE 24.—SHOWING DEATHS IN NEW JERSEY UNDER FIVE YEARS OF AGE PER 10,000 POPULATION FOR TWENTY-EIGHT YEARS, TOGETHER WITH AVERAGES FOR THE NINETEEN YEARS, 1879–1897, AND ALSO AVERAGES FOR THE NINE YEARS, 1898–1906.

YEARS.	Deaths under five years per 10,000 popu- lation.	YEARS.	Deaths under five years per 10,000 popu- lation.
1879 1880 1881 1881 1882 1888 1884 1888 1894 1890 1890 1891 1890 1891 1892 1893 1894 1894 1895	75.55 65.50 65.65 88.36 72.70 63.86 71.36 65.14 68.85 74.74 72.26 81.82 73.48 72.72 65.42 65.42 66.42	1898 1899 1900 1901 1902 1903 1904 1905 1906	51.74 55.26 55.49 49.59 49.81 52.46 53.00 46.01 51.21
Average death-rate for nine- teen years ending 1897	71.69	Average death-rate for nine years ending 1906	51.62

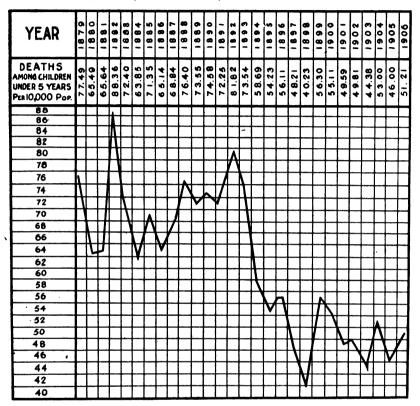
TABLE 25.—SHOWING PERCENTAGE OF DEATHS UNDER FIVE YEARS TO TOTAL DEATHS, AND DEATHS UNDER FIVE YEARS PER 10,000 INHABITANTS, FOR THE CITIES OF NEW JERSEY HAVING OVER 5,000 POPULATION, FOR THE YEAR ENDING DECEMBER 31, 1906.

NAMES OF CITIES.	Percentage of deaths under 5 years to total deaths.	Deaths under 5 years per 10,000 inhabitants.
Asbury Park	29.77	40.60
Atlantic City	23.94	42.99
Englewood	27.66	47.24
Garfield	67.10	94.26
Hackensack	31.61	53.37
Bordentown	17.14	29.46
Burlington	29.45	52.65
Camden	36.17	66.71
Gloucester		67.49
Bridgeton		32.30
Millville	36.75	50.23
Bloomfield	30.00	42.26
East Orange	24 16	25.09
Irvington	21.78	29.08
Montclair	<b>34</b> .87	54.00
Newark	33.17	63.29
Orange	30.79	62.66
West Orange	25.58	27.26
Bayonne	47.43	81.50
Harrison	40.77	71.60
Hoboken	30.75	<b>65.9</b> 8
Jersey City		64.63
Kearny	27.82	48.79
Town of Union		50.09
West Hoboken		44.25
West New York		52.76
Lambertville		54.98
Princeton	32.95	44.92
Trenton		54.08
New Brunswick		69.03
Perth Amboy		69.01
South Amboy	35.77	78.30
Long Branch	20.69	87.37
Red Bank		46.66
Dover		45.06
Morristown		68.17
Passaic		79.55
Paterson		60.37
Salem		38.06
North Plainfield	27.36	22.66
Elizabeth		64.00
Plainfield		44.58
Rahway		17.06
Summit		26.56
Westfield		33.01
Phillipsburg	34.16	48.34

TABLE 26.—SHOWING NUMBER OF DEATHS IN NEW JEBSEY AMONG CHILDREN UNDER FIVE YEARS OF AGE IN MANUFACTURING DISTRICTS, AND ALSO IN COUNTIES OUTSIDE OF THE LARGER TOWNS, WITH COMPARATIVE MORTALITY.

NAMES OF MANUFACTURING TOWNS.	Esti- mated popu- lation.	ren und'r five years	under five years of age for each	larger cities.	under five years of age in counties	Number of deaths of children un- der five years of age for each 1,000 of population in counties out- side of larger cities.
D (IT1 C- )	44.150					
Bayonne (Hud. Co.)	44,170		8.15	31,193	171	5.48
Beverly (Bur. Co.)	2,320 3,942		9.05 3.55	50,562	198 171	$\frac{3.92}{3.44}$
Boonton (Mor. Co.) Bordentown (Bur. Co.)	3,942 4,073	14 12	3.35 2.95	49,732 50,562	198	3.92
Bound Brook (Som. Co.)	3,542		6.49	31,197	103	3.30
Bridgeton (Cumb. Co.)	13,624		3.23	26,525	103	2.68
Burlington (Bur. Co.)	8,167	43	5.27	50,562	198	3.92
Camden (Cam. Co.)		566	6.87	31,190	104	3.33
Carlstadt (Ber. Co.)			3.43	79,220	343	4.20
Elizabeth (U. Co.)	62,185	398	6.40	18,112	79	4.36
Garfield (Ber. Co.)	5,410	51	9.43	79,220	343	4.20
Gloucester City (Cam. Co.),	8,298	56	6.75	31,190	104	3.33
Hoboken (Hud. Co.)	66,689	440	6.60	31,193	l îři	5.48
Jersey City (Hud. Co.)	237,952	1,538	6.46	31,193	171	5.48
Lambertville (Hunt. Co.)		28	5.50	28,166	82	2.91
Lodi (Ber. Co.)	2,968	14	4.72	79,220	343	4.20
Millburn (E. Co.)	3,251	9	2.77	32,414	100	3.09
Milltown (Mdx.Co.)	1,340	2	1.49	42,941	182	4.24
Millville (Cumb. Co.)	12,144	61	5.43	26,525	71	2.68
Newark (E. Co.)	290,733	1,810	6.23	32,414	100	3.09
New Brunsw'k (Mdx. Co.),	<b>23</b> ,758	164	6.90	42,941	182	4.24
Orange (E. Co.)	26,493	166	6.27	32,414	100	3.09
Passaic City (Pas. Co.)	39,849		7.96	27,339	119	4.35
Paterson (Pas. Co.)	112,801	682	6.05	27,339	119	4.85
Perth Amboy (Mdx. Co.)			6.97	42,941	182	4.24
Phillipsburg (W. Co.)	14,012	55	3.93	26,915	76	2.82
Plainfield (U. Co.)	19,088		4.45	18,112	79	4.36
Rahway (U. Co.)	8,792		1.59	18,112	79	4.36
Raritan (Som. Co.)	4,096	27	6.59	81,177	108	3.30
Riverton Bor. (Bur. Co.)	1,662	5	3.12	50,562	198	3.92
Salem City (Salem Co.)	6,569		3.25	19,869	56	2.82
South River (Mdx. Co.)	3,744	36 87	9.62	42,941	182	4.24 5.48
Town of Union (Hud. Co.),		458	5.01 5.30	31,193	171 80	3.86
Trenton (Mer. Co.)	86,355 4.638	26	5.61	20,736	80 71	2.68
Vineland (Cumb. Co.)			6.87	26,525	171	3.41
Wharton (Mor. Co.)	2,328	1 10	0.8/	49,732	1/1	3.11

CHART SHOWING DEATHS IN NEW JERSEY AMONG CHILDREN UNDER FIVE YEARS OF AGE, PER 10,000 POPULATION, FOR TWENTY-EIGHT YEARS.

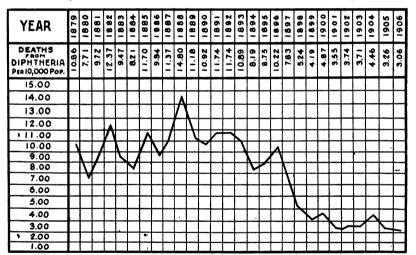


Diphtheria.—The mortality from diphtheria has continued to be low during the past year, the deaths numbering 673, this being the smallest number recorded for any year since the establishment of this bureau (1878). The striking decrease in deaths due to this cause which occurred in 1898 has been maintained during the past nine years, the average deaths from that period having been 784.22 per annum, while for the previous nineteen years the average number of deaths from this disease was 1430.21.

TABLE 27.—SHOWING DEATHS IN NEW JERSEY FROM DIPHTHERIA, WITH AGES OF DECEDENTS, FOR YEAR ENDING DECEMBER 31, 1906.

AGE PERIODS.	Deaths from diphtheria.	AGE PERIODS.	Deaths from diphtheria.	AGE PERIODS.	Deaths from diphtheria.
Under 1 month	5	25 to 30	4	60 to 70	
Under 1 year	· 57	30 to 35	3		
1 to 5	363	35 to 40	2	80 to 90	1
5 to 10	176	40 to 45		Over 90	
10 to 15	47	45 to 50	1	Not stated	
15 to 20	6	50 to 55			
20 to 25	8			Total	673

CHART SHOWING DEATHS FROM DIPHTHERIA, PER 10,000 POPULATION, IN NEW JERSEY, FOR THE TWENTY-EIGHT YEARS ENDING DECEMBER 31, 1906.



Typhoid Fever.—The deaths from typhoid fever in New Jersey during the year ending December 31st, 1906, numbered 408, or 1.86 per 10,000 inhabitants. In built-up districts the rate was slightly higher (1.93), and in rural localities it was slightly lower (1.69). These figures vary but little from the records of the last six years, and show, when compared with the deaths caused by typhoid fever during the preceding twenty-one years (1879-1899) a very great reduction in the mortality from this cause. Compared

with the deaths from typhoid fever in the entire registration area of the United States, the number of deaths from this cause in New Jersey per 10,000 inhabitants is shown in the following table:

TABLE 28.—SHOWING COMPARATIVE DEATH-RATES FROM TYPHOID FEVER, PER 10,000 INHABITANTS, IN THE REGISTRATION AREA OF THE UNITED STATES AND IN NEW JERSEY, FOR THE FIVE YEARS ENDING DECEMBER 31, 1905.

	DEATHS FROM TYPHOID FEVER, PER 10,000 INHABITANTS									
	Annual average, 1901–1905.	1901.	1902.	1908.	1904.	1905.				
Registration area of United States	} 3.87	8.24	8.44	8.43	8.19	2.81				
New Jersey	1.91	1.98	2.17	1.92	1.87	1.68				

Reference to table 33 shows that in the larger towns the number of deaths from typhoid fever is not excessive except in cases where the water-supply is known to be polluted or of doubtful purity. Periodical inspections of the water-sheds of all of the surface sources of public water-supplies in the State are regularly made, and the results of laboratory examinations of the water supplied for public uses are furnished to the local authorities.

TABLE 29.—SHOWING DEATHS PER 10,000 POPULATION FROM TYPHOID FEVER IN NEW JERSEY FOR TWENTY-EIGHT YEARS.

YEAR.	Population.*	Number of deaths from typhoid fever.	Deaths from typhoid fever, per 10,000 in- habitants.	YEAR.	Population.*	Number of deaths from typhoid fever.	Deaths from typhoid fever, per 10,000 in- habitants.
1879	1,020,584 1,180,892 1,160,275 1,189,658 1,209,048 1,248,224 1,278,038 1,310,431	324 373 574 884 564 640 642 545	5.12 5.02 4.15	1893	1,538,799 1,578,873 1,672,942 1,718,543 1,764,141 1,810,008 1,855,872 1,883,669	506 485 568 577 478 450 486 356	3.28 3.07 3.39 3.35 2.70 2.48 2.62 1.87
1887 1888 1889 1890 1891 1892	1,842,829 1,875,227 1,407,625 1,441,017 1,478,784 1,511,658	522 620 724 782 695 628	4.50 5.14 5.42 4.69	1901 1902 1908 1904 1905	1,925,781 1,967,893 2,016,797 2,058,909 2,144,148 2,196,238	352 428 388 384 360 408	1.93 2.17 1.92 1.87 1.68 1.86

<sup>\*</sup> Population estimated except for census years.

TABLE 30.—SHOWING DEATHS FROM TYPHOID FEVER IN NEW JERSEY, PER 10,000 POPULATION, BY COUNTIES, FOR THE SIX YEARS ENDING DECEMBER 31, 1906, WITH AVERAGES FOR SIX YEARS

COUNTIES.			YE	ARS.			Aver- ages
OUNTES.	1901.	1902.	1903.	1904.	1905.	1906.	for six years.
Atlantic County	2.67	2.74 1.08	2.81	1.97 1.24	2.01	1.60	2.30 1.12
Bergen CountyBurlington County	2.58	2.23	3.61	2.89	2.58	3.18	2.86
Camden County	2.11	2.44	1.07	2.46	1.81	2.98	2.15
Cape May County	2.26	.60	.75	2.10	1.73	1.65	1:17
Cumberland County	1.94	2.32	.96	2 29	2.88	1.15	1.73
Essex County	1.93	2.12	2.04	1.41	1.39	1.79	1.78
Gloucester County	2.81	2.17	2.16	1.54	1 16	3.14	2.16
Hudson County	1.74	1.86	1.66	1.99	2.66	1.71	2.10
Hunterdon County	1.45	2 03	1.74	1.45	.90	1.80	1.56
Mercer County	1.75	6.04	5.14	3 87	2.35	3.26	3.74
Middlesex County	1.47	1.95	1.05	2.63	1.55	.70	1.56
Monmouth County	1.92	2.36	1.63	1.95	2.62	2.47	2.16
Morris County	1.06	1.21	1.75	1.00	2.21	1.75	1.50
Ocean County	1.00	2.98	.49	2.43	3.35	.95	2.02
Passaic County	2.19	2.50	202	.75	1.14	1.33	1.66
Salem County		1.96	1.96 1.16	3.53	2.28	3.03	2.13
Somerset County	.60 .41	.59 <b>2.</b> 51	.80	.86 1.97	2.48 .43	1.35	1.34 1.31
Sussex County	2.64	2.57	2.32	1.99	1.37	1.66	2.09
Union County Warren County	1.85	4.74	1.05	2.35	1.73	1.95	2.28
The State	1.83	2.17	1.92	1.87	1.68	1.86	1.89

TABLE 31.—SHOWING DEATHS FROM TYPHOID FEVER IN NEW JERSEY, FOR YEAR ENDING DECEMBER 31, 1906 AND SHOWING ALSO THE NUMBER OF DEATHS FROM THIS DISEASE IN URBAN AND RURAL DISTRICTS, TOGETHER WITH POPULATION AND DEATHS PER 10,000 INHABITANTS

	Aggregate population.	Deaths from typhoid fever.	Deaths from typhoid fever per 10,000 population.
State	2,196,238	408	1.86
	1,505,142	291	1.93
	691,096	117	1.69

TABLE 32.—DEATHS FROM TYPHOID FEVER IN NEW JERSEY, BY AGE PERIODS, FOR SIX YEARS.

	AGE PERIODS.											
YEARS.	Under 1 year.	1 to 10.	10 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	Over 80.	Not stated.	Totals.
1901	2 1 3 2 8 1	35 25 26 24 33 84	57 72 77 77 77 73 85	107 124 108 108 86 110	74 92 88 83 65 67	36 53 49 31 49 59	17 83 19 35 28 28	13 18 17 16 16 11	9 8 5 6 10	1 1 3 1 3	1 1 1	352 428 388 384 360 408
Totals	12	177	441	643	469	277	160	91	38	9	3	2,320

TABLE 33.—SANITARY DISTRICTS IN NEW JERSEY IN WHICH DEATHS FROM TYPHOID FEVER OCCURRED DURING THE YEAR ENDING DECEMBER 31, 1906, WITH POPULATION, NUMBER OF DEATHS, SOURCE OF WATER-SUPPLY AND NATURE OF DEAINAGE.

7				
NAME OF SANITARY DISTRICT.	Population, census 1905.	Number of deaths from typhoid fever.	Water- supply.	Drainage.
Alexandria township	1.007	1	Domestic	No sewers.
Alloway township	1.562	l î	Domicsuc	THO BE WEID.
Asbury Park	4.526	1 3	Public	Sewers.
Atlantic City.	37,598	1 7	44	OCWCIB.
Bayonne	42,262	8		' "
Belleville	7,632	l i		No sewers.
Belmar borough	1.089	li		Sewers.
Belvidere	1.869	l î		DCWCIB.
Bethlehem township	1,594	1 1	Domestic	No sewers.
Powerly Otty	2,258	i		Sewers.
Beverly City	1,537	i	Domestic	
Bloomfield	11,668	2	Public	Sewers.
Bordentown		2 2	rupnc	bewers.
Doruel December	4,073			1 4
Bound Brook borough	3,389	1		1
Bridgeton	18,624	1		1
Buena Vista township	2,624	1	Domestic	
Burlington City	8,088	. 3	Public	Sewers.
Camden City	83,363	16	<b></b>	
Carlstadt borough	3,100	1	Domestic	No sewers.
Centre township	2,651	1		1 ::
Chester township (Burlington)	4,849	1	· :: ···	1 ::
Chester township (Morris)	1,378	1	::	
Chesterfield township	1,141	2		! ::
Clayton borough	1,864	4	Public	
Commercial township	2,476	2 2 1	Domestic	1 ::
Delran township	1,840	2	"	1 ''
Eagleswood township	534		"	"
East Amwell township	1,256	2		"
East Orange	25,175		Public	- 44
Elizabeth	60,509	11	"	Sewers.
Englewood	7,922	8	"	- 44
Farmingdale borough	399	2	Domestic	No sewers.
Franklin township (Gloucester)	2,197	1	"	"
Frelinghuysen township	728	1	"	"
Garfield borough	5,092	2	"	"
Glassboro township	2,607	3	"	44
Gloucester City	8,055			Sewers.
Gloucester township	2,300		Domestic	No sewers.
Green wich township	854	2	"	"
Hackensack	11,098	2	Public	Sewers.
Hackettstown	2,594	1	"	**
Haddon township	1,009	ī	Domestic	No sewers.
Haddon Heights borough	654	ī	"!	"
Hamilton township (Mercer)	5,150	2	"	4.6
Hammonton township	4.334	ī	"	- 44
	-,20-	'	****	

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TABLE 33.—SANITABY DISTRICTS IN NEW JERSEY IN WHICH DEATHS FROM TYPHOID FEVER OCCURBED DURING THE YEAR ENDING DECEMBER 31, 1906, WITH POPULATION, NUMBER OF DEATHS, SOURCE OF WATER-SUPPLY AND NATURE OF DRAINAGE—(Continued).

NAME OF SANITARY DISTRICT.	Population census 1905.	Number of deaths from typhoid fever.	Water- supply.	Drainage.
Hanover township	5,294	1	Domestic	No sewers.
Hardyston township. Harmony township. Hoboken	8,434	3	"	• • •
Harmony township	1,086	1	"	44
Hoboken	65.468	11	Public	Sewers.
Holmdel township	1,221 1,259	1 1	Domestic	No sewers.
Igreev City	232,699	51	Public	Sewers
Kearny	13,601	2	1 40110	00 11013.
Kearny	1.222	1	Domestic	No sewers.
Lakewood	4,265	1 1	Public	Sewers.
Landis township	5,351	1 1	Domestic	
Linwood horough	1,983 408	1 1	;; ;;	
Little Kalls fownshin	3,079	i	"	"
	2,793	ī	"	"
Long Branch	12,188	7	Public	Sewers.
Long Branch Lopatcong township Madison borough Matawan township Medford township Merchantville borough Middle township	695	1	Domestic	No sewers.
Madison borough	4,115	1	Public	;;
Madford township	1,365 2.030	1 1	Domestic	"
Merchantville borough	1.632	2	Public	Sewers.
	2,584	1	Domestic	No sewers.
Middletown township	5,600	1		
Millstone township	156	1 2 2		1
Millville	11,884	2	Public	
Montgomery township	16,370 1,504	1 1	Domestic	No sewers.
Minville Montclair Montgomery township Morristown Neptune township.	12,146	1 7	Public	**
Neptune township	1 9.357	1	Domestic	
	283,289	53	Public	Sewers.
New Brunswick	23,133	2	"	27
Newton township	4,422 5,509	53 2 1 7		No sewers.
North Bergen township	11,134	í	Public	44
Ocean City	1,835	1	"	Sewers.
Oldmans township	1,374	3	Domestic	No sewers. Sewers.
Orange	26,101	8	Public	Sewers.
Oxford township. Palmyra township. Passaic City.	2,964 2,643	i		No sewers.
Passaic City.	37,837	16	Public	Sewers.
	111.529	5		
Pensauken township	3,957	2 4	Domestic	No sewers.
Perth Amboy	25,895	1	Public	Sewers.
Pensauken township Perth Amboy. Pittsgrove township. Plainfield Prospect Park borough.	2,154 18,468	1 2	Public	No sewers. Sewers.
Prospect Park borough	1,911	ī	1 **	. 1
	8 640	$\begin{bmatrix} 2\\1\\7\\1 \end{bmatrix}.$	"	
Red Bank	6,263	1 1 .		
Ridgewood town and township	3,980 479	3	Domestic	No sewers.
Red Bank. Ridgewood town and township. Rocky Hill borough. Salem City. Shrewsbury township. Somerville	6,443	1 2 1 2 2	Public	Sewers.
Shrewsbury township.	5,402	l ĩ	Domestic	No sewers.
Somerville	5,402 4,782	2	Public	No sewers. Sewers.
South Orange borough	4,934	2	1 44	
South Orange township	1,946	1		No sewers.
Stockton borough	588 17,005	1 4	Public	Sowers
Trenton	84,180	84	"	
Wall township	3,518		Domestic	No sewers.
Wayne township		2 1 2 1 1	"	.  ::
Weenawken township	8,027 569	2	" "	·  ";
West Cane May horough	569 902	1 1	Dublic "	· - "
West Hoboken	29.082	4	"	Sewers.
West New York	7,196	1		
West Orange	7,872	1	"	. No sewers.
West Windsor township	1,320 2,285 2,856	1	Domestic	
Winslow township	2,280	1 1	" "	·  "
Wayne township Weehawken township West Cape May borough West Hoboken West New York West Orange West Windsor township Wharton borough Winslow township Woodbridge township Woodbridge township	10,221	1	Public	., ., .,
Woodstown borough	1,500	1 i Dia	Domestic	DOGLE
		- 010		

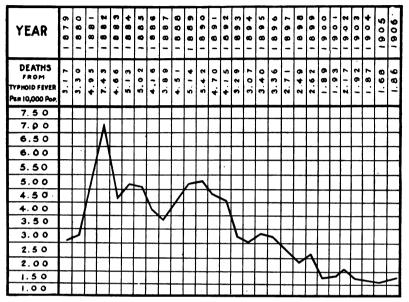
TABLE 34.—DEATHS FROM SCARLET FEVER, DIPHTHERIA AND TYPHOID FEVER IN NEW JERSEY FOR THE TWENTY-EIGHT YEARS ENDING DECEMBER 31, 1906, COMPARED WITH TOTAL DEATHS.

			(	SCARLET	FEVER.	DIPHTE	TERIA.	түрного	FEVER.
tio	Popula- tion,	Total deaths,	Death- rate per 1,000 popula- tion.	Number of deaths.	Death- rate per 1,000 popula- tion,	Number of deaths.	Death- rate per 1,000 popula- tion.	Number of deaths.	Death- rate per 1,000 popula- tion.
1880 1881 1882 1883 1884 1884 1885 1887 1888 1889 1890 1891 1892 1898 1894 1894	1,130,892 1,278,033 1,441,017	22,734 24,331 27,173 26,543 28,530 28,840 32,685 30,596 30,004 30,634 30,767	18.07 16.77 18.39 22.90 20.60 19.20 18.63 17.80 19.01 19.90 19.50 21.62 19.68 19.09 18.31 17.90	627 573 499 1,306 853 547 646 222 255 574 533 209 288 1,008 445 272 264 183	.61 .51 .43 1.01 .74 .51 .17 .19 .42 .38 .15 .19 .629 .17 .16	1,100 873 1,128 1,472 1,146 1,027 1,308 1,527 2,036 1,574 1,575 1,737 1,776 1,677 1,294 1,464 1,758	1.09 .77 .97 1.24 .95 .82 1.17 .99 1.14 1.48 1.109 1.17 1.17 1.17 2.88 82 .82	324 378 574 884 564 640 642 545 522 620 724 782 695 628 568 485 568 577	. 32 .33 .49 .74 .47 .51 .50 .42 .39 .45 .51 .47 .47 .42 .33 .31
1897	1 883 660	29,822 27,337 30,999 31,474	16.90 15.11 16.70 16.62 16.48 15.91	203 201 187 220 179 217	.12 .11 .10 .12 .09	1,382 950 777 927 683 683	.78 .52 .42 .49 .36	478 450 486 356 352 428	.27 .25 .26 .19 .19
1908 1904 1905 1906		30.298	15.78 17.14 15.79 16.24	299 416 164 193	.15 .20 .07 .09	748 918 699 673	.37 .45 .33	388 384 360 408	.19 .19 .17

TABLE 35.—SHOWING DEATHS FROM TYPHOID FEVER AND DEATHS PER 10,000 INHABITANTS FROM TYPHOID FEVER IN THE COUNTIES OF NEW JERSEY FOR YEAR ENDING DECEMBER 31, 1906, ALSO CHART SHOWING DEATHS FROM TYPHOID FEVER PER 10,000 INHABITANTS IN THE COUNTIES OF NEW JERSEY FOR SAME PERIOD.

NAMES OF COUNTIES.	Number of deaths from typhoid fever.	Deaths from typhoid fever per 10,000 inhabitants.	Chart showing deaths from typhoid fever per 10,000 inhabitants.
A.1			
Atlantic County	10	1.60	<del></del>
Bergen County	12 •	1.15	<del></del>
Burlington County	20	3.18	
Camden County	37	2.98	
Cape May County	3 6	1.63	
Cumberland County	75	1.15	<del></del>
Essex County		1.79	<del></del>
Gloucester County	11	3.14	<del></del>
Hudson County		1.71	
Hunterdon County	97	1.80	<del></del>
Mercer County	37 · 7	3.26	
Middlesex County		.70	
Monmouth County	22	2.47	
Morris County	$\begin{array}{c} 12 \\ 2 \end{array}$	1.75	<del></del>
Ocean County		.95	<del></del>
Passaic County	24	1.33	<del></del>
Salem County	8 5	3.02	<del></del>
Somerset County	4	1.35	
Sussex County	90	1.71	<del></del>
Union County	20	1.66	
Warren County	8 1	1 95	

CHART SHOWING DEATHS FROM TYPHOID FEVER IN NEW JERSEY, PER 10,000 POPULATION. FOR TWENTY-EIGHT YEARS.

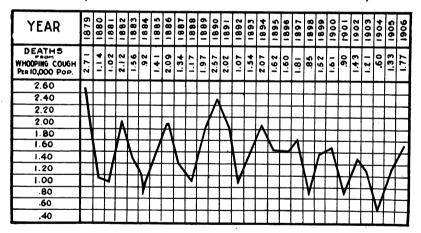


Whooping Cough.—Three hundred and eighty-eight deaths from whooping cough were reported during the year, or 1.77 per 10,000 inhabitants. These figures show a greater mortality during the past year from this disease than has been recorded since the year 1894, when the death-rate from whooping cough in the State was 2.07 per 10,000 of the population. Official sanitary precautions have thus far had little, if any, influence in restricting the spread of this disease, for, like measles, it is often unrecognized in its early stages, and the infection is spread before the true nature of the cough is known, and moreover, like certain other minor infectious diseases, it is treated with indifference by many parents, and the isolation of the patients during the long period of infectiousness is difficult to maintain, and the prevailing public sentiment, based on the small proportion of fatalities compared with the large number of cases, does not sustain rigid isolation restrictions.

TABLE 36.—SHOWING DEATHS IN NEW JERSEY FROM WHOOPING COUGH, WITH AGES OF DECEDENTS, FOR YEAR ENDING DECEMBER 31, 1906.

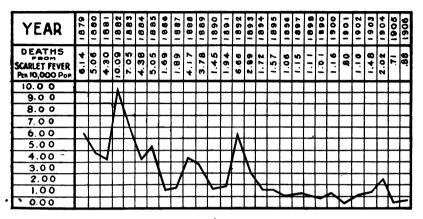
AGE PERIODS.	Deaths from whooping cough.	AGE PERIODS.	Deaths from whooping cough.	AGE PERIODS.	Deaths from whooping cough.
Under 1 month	13	20 to 25	1	50 to 55	
Under 1 year	208	25 to 30	•	55 to 60	••••••
1 to 5	148	30 to 35		60 to 70	
5 to 10	11	35 to 40	2	70 to 80	
10 to 15		40 to 45		80 to 90	•••••
15 to 20	ĭ	45 to 50		Over 90	
	_		_		
				Total	. 388

CHART SHOWING DEATHS FROM WHOOPING COUGH IN NEW JERSEY, PER 10,000 POPULATION, FOR THE TWENTY-EIGHT YEARS ENDING DECEMBER 31, 1906.



Scarlet Fever.—The average number of deaths from scarlet fever in New Jersey during the past twenty-eight years has been 413, and during the fifteen years, 1879-1892, the average number was 572. During the year ending December 31st, 1906, this disease caused 193 deaths, and the average for the past thirteen years has been 230. This decided diminution in the mortality from this disease, which has continued with very little variation since 1892, has been generally attributed to a change in type which this affection has assumed, and which has not only diminished the fatalities, but has also diminished the prevalence of the disease.

CHART SHOWING DEATHS FROM SCARLET FEVER IN NEW JERSEY, PER 10,000 POPULATION, FOR TWENTY-EIGHT YEARS.

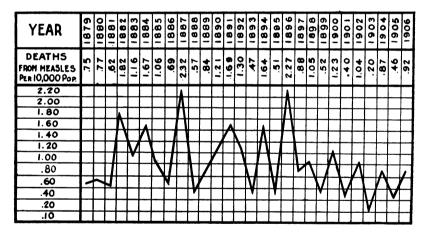


Measles.—The number of deaths reported as having been caused by measles was 203, and the average number for the past twenty-eight years has been 156. The records show that epidemics of measles have occurred with much regularity, and that no locality has escaped the infection. The measures which are successful in preventing the spread of certain other infectious diseases, for example, scarlet fever, are unavailing in dealing with measles, for the disease is communicable before the rash appears, and during the time from the inception of the disease until the appearance of the eruption, especially in the first cases, the infectious nature of the affection escapes recognition, and the seed for an epidemic has thus been planted before any isolation restrictions are resorted to. This history is repeated in every town, and frequently the disease has become well established before any physician is called to see a case, and before the character of the prevailing malady has been made known. The growing opinion among health officers is that measles is transmitted from patient to patient only, and that no disinfection of apartments, clothing, &c., will avail to prevent the spread of this disease; that the infective organism is short-lived, and that the isolation of cases, especially the first case, at the very beginning of the disease, is the most effective measure which can be employed to restrict the spread of the infection.

TABLE 37.—SHOWING DEATHS IN NEW JERSEY FROM MEASLES, WITH AGE AT DEATH, FOR YEAR ENDING DECEMBER 31, 1906.

AGE PERIODS.	Deaths from measles.	AGE PERIODS.	Deaths from measles.	AGE PERIODS.	Deaths from measles.
Under 1 month	4	25 to 30	1	60 to 70	
Under 1 year	$5\bar{2}$	30 to 35		70 to 80	
1 to 5	121	35 to 40		80 to 90	
5 to 10	19	40 to 45		Over 90	
10 to 15	2	45 to 50		,	
15 to 20	1	50 to 55	1	1	
20 to 25	1	155 to 60		Total	203

CHART SHOWING DEATHS IN NEW JERSEY FROM MEASURS, PER 10,000 POPULATION, FOR TWENTY-EIGHT YEARS ENDING DECEMBER 31, 1906.

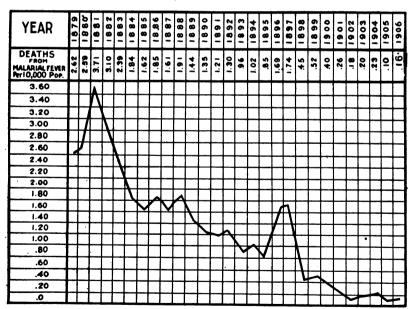


Malarial Diseases.—The following table and chart show the mortality in New Jersey from malarial affections for the twenty-eight years, 1879-1906:

TABLE 38.—SHOWING DEATHS IN NEW JERSEY FROM MALARIAL FEVER FOR TWENTY-EIGHT YEARS.

YEARS.	Deaths from malarial fever.	YEARS.	Deaths from malarial fever.	YEARS.	Deaths from malarial fever.
1879	268	1888	264	1897	132
1880	293	1889	203	1898	82
1881	431	1890	195	1899	96
1882	379	1891	180	1900	84
1883	290	1892	198	1901	50
1884	230	1893	148	1902	36
1885	209	1894	162	1903	40
1886	243	1895	144	1904	47
1887	217	1896	119	1905	21
				1906	33

CHART SHOWING DEATHS FROM MALARIAL AFFECTIONS, PER 10,000 INHABITANTS, IN NEW JERSEY, FOR TWENTY-EIGHT YEARS.



## 44 REPORT OF THE BOARD OF HEALTH.

Small-pox.—During the year ending December 31st, 1906, eighty-four cases of small-pox were reported in New Jersey, and one death occurred from this disease.

TABLE 39.—SHOWING DEATHS IN NEW JERSEY FROM SMALL-POX FOR TWENTY-EIGHT YEARS.

YEARS.	Deaths from small-pox.	YEARS.	Deaths from small-pox.	YEARS.	Deaths from small-pox.
1879	15 254 367 54 7 2 4 5	1888	38 43 11 23 2	1897	5 142 432 16 24 1

Cancer.—The following tables and chart show the number of deaths certified as having been caused by cancer during the year ending December 31st, 1906:

TABLE 40.—SHOWING DEATHS FROM CANCER IN NEW JERSEY FOR TWENTY-EIGHT YEARS.

YEARS.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
Deaths from cancer Deaths from can-)		1												
cer per 10,000 population	3.70	3.75	3.88	3.37	3.81	3.87	3.89	4.15	4.21	4.45	4.11	4.41	4.34	4.55

YEARS.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.
Deaths from cancer Deaths from can-)	723	731	770	811	857	852	946	921	1,042	1,031	1,132	1,125	1,282	1,389
cer per 10,000 population	4.69	4.63	4.60	4.71	4.33	4.70	5.10	4.84	5.43	5.24	5.61	5.46	5.98	6.32

TABLE 41.—DEATHS FROM CANCER IN NEW JERSEY, BY AGE PERIODS, FOR SIX YEARS.

	AGE PERIODS.											
YEARS.	Under 1 year.	1 to 10.	10 to 20.	20 to 80.	80 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	Over 80.	Not stated.	Totals.
1901	1 1 7 6 2	6 7 10 5 15 12	9 5 2 9 11 6	19 24 22 21 22 25	85 92 79 81 87 104	196 190 179 168 239 241	280 322 298 286 294 350	240 216 308 302 353 350	159 136 177 199 190 225	47 81 57 47 64 74	1 7 5	1,043 1,031 1,132 1,125 1,282 1,389
Totals	17	55	42	133	528	1,213	1,825	1,769	1,086	320	14	7,002

TABLE 42.—DEATHS FROM CANCER IN NEW JERSEY, SHOWING ORGANS AFFECTED AND AGE AT DEATH, FOR THE YEAR ENDING DECEMBER 31, 1906.

CANCER.	Under 1 mo.	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 80.	30 to 35.	35 to 40.		45 to 50.	to	55 to 60.	to		to	Over 90.	Age not stated.	Totals.
Of the mouth Of the stomach and					1	1	3	1	3	3	3	5	15	13	16	15	8	1		88
liver Of the intestines and	١	1	3	1			5	2	13	21	29	58	80	77	171	103	25	<b>.</b>		58 <b>9</b>
rectum	١		2					2	6	10	11	7	15	14	32	24	9	1	,.	133
Of the female geni- tal organs Of the breast	۱.,	<b></b>				<u>ï</u>	2	4	7 6	12 12	<b>3</b> 6	37 20	25 24	35 17	43 32	18	<b>3</b> 8	1		221 155
Of the skin	١		 5		<b>2</b>	<u>.</u>	2	 4	<u>.</u>	9	6	19	2	35 17 3 15	8 48	18 24 10 31	12			29 174
Totals	1	1	10	2	3	8	12	13	87	67	93	148	176	174	350	 225	69	5		1,389

TABLE 43.—DEATHS FROM CANCER IN NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1906, PER 10,000 POPULATION, BY COUNTIES AND BY CITIES OF OVER 5,000 INHABITANTS.

NAME OF PLACE.	Deaths from cancer.	Deaths per 10,000 popu lation.
Atlantic County	13	5.65
Atlantic City	24	6.07
Bergen County	36	4.54
Englewood Hackensack	7 8	8.47 6.99
Burlington County	29	1 5.74
Burlington City	10	12.24
Camden County	13	4.17
Camden City.	54	6.36
Gloucester City	2 6	2.41
Cape May County		3.29
Cumberland County	17	6.41
Bridgeton	12	8.81
Millville	6	4.94
Essex County	13 7	4.01 5.80
East Orange.	22	8.49
Irvington	4	5.29
Montclair	12	7.12
Newark	209	7.19
Orange	23	8.68
West Orange	. 6	7.44
Gloucester County	18	5.14
Hudson County	24	7.69
Bayonne	18	4.08
Harrison.	_5	3.77
Hoboken	70	10.50
Jersey City Kearny	138	$5.80 \\ 2.12$
Town of Union	3 8	4.61
West Hoboken.	12	3.96
West New York.	1	1.32
Hunterdon County	28	8.41
Mercer County	8	3.86
Trenton	84	9.73
Middlesex County	13	3.03
New Brunswick	15	6.31
Perth Amboy	12	4.36
South Amboy	7 <b>3</b> 9	11.19 4.38
Monmouth County	39 15	11.68
Red Bank	1	1.56
Morris County	24	4.83
Dover	ĩ	1.55
Morristown	23 12	18.67
Ocean County	12	5.69
Passaic County	12	4.39
Passaic City	18	4.52
Paterson	83	7.36
Salem County	12	6.04
Salem City	3	4.57 6.41
Somerset County	20 5	8.72
Sussex County	20	8.57
Jnion County	9	4.97
Elizabeth	41	6.59
Plainfield	16	8.38
Rahway	ĩ	1.14
Summit	7	9.79
Warren County	16	5.94
Phillipsburg	9	6.42
Total in cities of over 5,000 inhabitants	1,007	
Total for State	1,389	
Rate per 10,000 population (State)	-,	6.32

CHART SHOWING DEATHS IN NEW JERSEY FROM CANCER, PER 10,000 POPULA-TION, FOR TWENTY-EIGHT YEARS, 1879-1906.

YEAR	1879	1880	1881	1882	1883	1884	.5881	1886	1881	1888	1889	1890	1681	1892	1893	1894	1895	1896	1897	8881	1899	1900	1961	1902	1903	1904	1905	9061
DEATHS PROM CANCER PERIO,000 Pop.	3.70	3.75	3.88	3.37	3.81	3.87	3.89	4.15	4.21	4.45	4.11	4.41	4.34	4.55	4.69	4.63	4.60	4.71	4.83	4.70	5.10	4.84	5.43	5.42	5.6 1	5.46	5.98	6.32
6.40					П		Г																					
6.20								Г											П							П		
6.00											Г						Т		П	Г			Г			П		
5.80					$\vdash$			Т	$\vdash$	$\vdash$	$\vdash$	Т				Т	$\vdash$			П			Т		Т	П	7	
5.60												П							П						_		1	П
5.40				Г						Г									П		П		~			V		П
5.20							Г	Ţ.															7	Ť		П	_	П
5.00				Г																					П	П		П
4.80													_						$\overline{}$			4	٠,					П
4.60											Г				~	Ш				7								П
4.40				Γ.						_		_																П
4.20	Г												~						П									
4.00	Г		П					7			V						•											
3.80			Λ		_																							
3.60	-	7																										
3.40				V																								
3.20				Ľ																								

Suicide.—Three hundred and thirty-eight deaths were reported from this cause during the last statistical year. The average number of deaths from suicide for the past six years has been 311.

TABLE 44.—SHOWING DEATHS IN NEW JERSEY FROM SUICIDE FOR SIX YEARS, 1901-1906.

YEARS.	Deaths from suicide.	YEARS.	Deaths from suicide.
1901	265	1904	330
1902	271	1905	354
1903	314	1906	338

TABLE 45.—DEATHS IN NEW JERSEY FROM SUICIDE, SHOWING MODE OF DEATH AND AGE AT DEATH, FOR THE YEAR ENDING DECEMBER 31, 1906.

							A	GE	AT	DEA	TH.							
MODE OF DEATH.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 70.	70 to 80,	80 to 90.	Over	Not stated.	Totals.
y poison				8	16	9	13	15	14	14	13	8	13	6	1		+++++	130
y asphyxia	***	****	*****	****	4	5	9	1	4	8 6	1	2 5	8 6	1		********	*****	31 57
y strangulation	*****	++++	****	1	2	1	3 6	10	- 0	8	8	- 5	8	9				57
			******	1 2	1	0	3	12	11		1	0		1	1	********	24444	70 17
y cutting instruments	****		1	*****	*****	1 7	3	*	1	3	1 2	2	*****	1.2	1	*******	+++++	17
drowning	*****	*****	*****	1	Ð	1	- 2	1		3	1	3	1	1	****	*******	51100	21
y crushing	*****	*****	****	*****	****	****	ma	1		****	*****	1	****	++++	teriti	zed by		000
y precipitation from height			,,,,,,	1			****	2	1	2	****	1	2	1		.,		10
thers	****	****		*****		inn										*******	****	**********

TABLE 46.—SHOWING NUMBER OF DEATHS BY SUICIDE RECORDED IN NEW JERSEY, BY CITIES, AND BY COUNTIES, EXCLUSIVE OF CITIES, FOR THE YEAR ENDING DECEMBER 31, 1906.

				c	OUN	TRY	OF E	BIRTE	ī.			
NAME OF PLACE.	United States.	England.	France.	Germany.	Ireland.	Italy.	Scotland.	Hungary.	Sweden.	Other foreign.	Not stated.	Total.
Atlantic County			ļ									
Atlantic City Bergen County	6	ļ	ļ			ļ	ļ			·····		15
Knglewood	1								l			1
Hackensack	•••••	ļ	ļ			1			ļ <i>.</i>	ļ		1
Burlington County	•••••	•••••		•••••			ļ		ļ	•••••		9
Camdon County								l				1
Camden City	10	1		<b> </b>	1					1	1	14
Gloncester City	•••••	•		•••••	· ····	ļ			ļ	1		1
Cape May County	••••••								l	! !		3
Bridgeton	1	ļ	·····		ļ			<b> </b>	l	l	ļ	i
Millville			<b> </b>				ļ	<b> </b> -	ļ		ļ	ļ <u>.</u> -
Essex County Bloomfield	•••••	•••••	·····			• • • • • • • • • • • • • • • • • • • •			·····	·····	ļ	3
East Orange	3	1										4
Irvington	1	<b></b>							<b> </b>		l	1
Montclair Newark	1		<u></u>	$\frac{2}{22}$								3
Orange	34 1	8	2	22	5	1 1		. 2	1	8	1	1 3 79 8 4
West Orange	4				l <del>.</del>	<u>.</u>						
Gloucester County						ļ				ļ		3
Hudson County	•••••	•••••	• ••••	2	<sub>i</sub>	·····		1	····:	•••••		9
Harrison	<u>.</u>			ĩ	l							2
Hoboken	4			11	3	1		l		1	1	21
Jersey City Kearny	14	•••••	•••••	1	3		1		1	3	•••••	26
Town of Union	2	•••••	•••••		•••••	•••••	•••••	1		•••••		26 3 3 9
West Hoboken	5			1		1				2	l	9
West New York	i,											1
Hunterdon County	•••••	•••••	•••••	•••••	•••••	•••••				•	·····	7 2
Trenton	8			1	1						1	11
Middlesex County					,.						ļ	4
New Brunswick	2			•••••			•••••			•••••		4 2 3 1
Perth AmboySouth Amboy	2	•••••	•••••	•••••	•••••	• • • • •	•••••	1	•••••	•••••	'''i'	3
Monmouth County	•••••											9
Long Branch	1											i
Red Bank	•••••	••••••	•••••		•••••	•••••				•••••	·····	3
Dover	•••••											
Morristown												
Ocean County	•••••		•••••	•••••	•••••			•••••	•••••	•••••		1
Passaic City	1	•••••	•••••	```i	•		•••••	•••••	•••••	•••••	•••••	3
Paterson	7	1		î	4	1		2		2	1	19
Salem County											ļ <u>.</u>	5-
Salem City	1	•••••	•••••	1	•••••	•••••	•••••	•••••	•••••	•••••	•••••	2
Somerset County	2								•••••	••••		3 2 19 5 2 5 2 5 2 7 2
Sussex County											ļ	5
Union County												2
Plainfield	4				1			[	•••••	1	1	9
Rahway									•••••		1	ĺí
Summit											ī	1
Warren County				•••••					•••••	•••••	•••••	6
Luunbanark	•••••			•••••					•••••			
		6	2				1					338

Rabies.—Nine deaths from rabies occurred during the year, distributed as follows: Two in Camden county, two in Essex, two in Hudson, two in Passaic county and one in Somerset. In previous years deaths from this cause have been recorded as follows: 1901, ten; 1902, nine; 1903, two; 1904, five; 1905, six. The prevalence of this disease among dogs in New England during the past two years, and its recent extension into the State of New York, should arouse the local authorities of New Jersev to energetic action for the prevention of its spread in this State. dogs should be destroyed and all others should be muzzled when they are allowed to run at large and unattended. These precautions, when faithfully applied, will effectually prevent the spread of this truly frightful malady, and the owners of dogs should lead in advocating the general enforcement of these protective meas-Unfortunately effective requirements for preventing the spread of rabies will not, under the laws as they at present stand, be uniformly enforced, and in the various townships and municipalities there will doubtless be, in the future as in the past, active efforts in one locality to prevent the spread of the infection, while in the adjoining community no official action whatever will be taken to prevent dogs from biting each other, nor for preventing unclaimed dogs from running at large. In the violent variety of rabies the dog is inclined to run away from home, and he is liable to pass the boundary line of the district in which the disease developed, and therefore it is essential that precautionary regulations for preventing the spread of this affection should be enforced by an act of the legislature, and that they should not be dependent upon the varving views and opinions of local sanitary authorities. Misguided opposition to the employment of precautionary measures (destruction of unclaimed animals and muzzling of all others when they are at large) predominates in some communities, but the experience in Great Britain shows conclusively the protection which those precautions afford. The official reports show that in the year 1887, 217 cases of rabies occurred in the British Isles: in the year 1888, 160 cases occurred; in 1889, there were 312 cases. Muzzling of dogs was then adopted, and the result is shown by the following figures: 1890, 129 cases; 1891, seventy-nine cases; 1892, thirty-eight cases. The muzzling regulation was then relaxed, with the following result: 1893, ninety-three cases; 1894, 248 cases; 1895, 672 cases. Muzzling was again resorted to, and

in 1896 there were 438 cases; in 1897, 151 cases; in 1898, seventeen cases; in 1899, nine cases; in 1900, no cases occurred.

In addition to an act requiring registration, licensing and tagging, it is advisable that the law should prohibit dogs at all times from appearing at large upon the public highways or elsewhere without muzzles; to hold the owner liable for any damage done by his dog; to require that all unclaimed dogs be destroyed.

Notifiable Diseases.—The act of the legislature requiring reports of certain infectious diseases contains the following provisions:

"1. That every physician shall, within twelve hours after his first professional attendance upon any person who is suffering from cholera, yellow fever, typhus fever, leprosy, plague, trichinosis, small-pox, varioloid, enteric (or typhoid) fever, diphtheria, membranous croup, scarlet fever, or any other contagious, infectious or communicable disease which hereafter may be publicly declared by the State board of health to be preventable and specially dangerous to the public health, report such sickness to the clerk of the local board of health having jurisdiction over the territory within which such sickness may be, or if such local board of health shall have designated some other officer thereof to receive such reports, then to such officer, which report shall be in writing, signed by such physician, and shall set forth the name, age and precise location of the person suffering from such disease; and every houseowner or householder who knows that any person living, dwelling or being in any building under his control is affected by any of the contagious, infectious or communicable diseases hereinabove specified or referred to shall, when no physician has professionally attended such sick person, within twelve hours after discovering the same, report the fact in writing to the same person and in the same manner as any physician attending such sick person would be required to do as hereinabove set forth: and on the thirtieth day of June and the thirty-first day of December, in each and every year, every physician, houseowner and householder making any report or reports as in this section required, shall be entitled to receive from the officer to whom such report or reports shall have been made during the preceding six months, a certificate in writing under the hand of such officer, setting forth the number of names of persons reported to have been affected with any of the diseases hereinabove specifically named or referred to, which certificate when presented by such physician, houseowner or householder to the proper disbursing officer of the city, borough, town or other local municipal government or township within which such affected person may have been, shall entitle such physician, houseowner or householder to receive from such disbursing officer the sum of ten cents for each and every name by such certificate certified to have been reported, unless such notification shall be found to have been erroneous; and any physician, houseowner or householder who shall refuse or neglect to perform the duty hereinabove required of him shall be liable to a penalty of fifty dollars.

"2. That the facts contained in every report filed with the clerk or other officer of any local board of health, pursuant to the provisions of the first section of this act, shall be entered by the officer to whom the same shall be delivered in a book kept exclusively for that purpose, which book shall be subject

to the inspection of the local board of health and its proper officers, and to the State board of health and its officers only; the officers of the local board of health to whom such report shall be delivered, and whose duty it is to make record of same, as in this section above set forth, shall also, at least once in each week, and daily when required by the State board of health, transmit the facts stated therein by mail to the board of health of the State of New Jersey, at Trenton, and shall further keep the said State board of health constantly informed concerning the measures which are employed by the local board of health to prevent the spread of the diseases in such reports mentioned, which facts and information shall be conveyed to the said State board of health in writing, and upon such blank forms as may be furnished by the said State board of health; any officer whose duty it is to make any report to said State board of health, as in this section above provided, and who neglects or fails to perform such duty, shall be liable to a penalty of fifty dollars for each and every such neglect or failure of duty."

By resolution of the State board of health, adopted October 11th, 1904, the following diseases were added to the notifiable list: Malaria, tuberculosis (in any of its manifestations), trachoma, hydrophobia, glanders, anthrax and chicken-pox. Objections were made by a member of one local board of health to the inclusion of chicken-pox in the list, and at a meeting of the State board, held April 20th, 1907, the matter having been referred to a committee, the following report was presented:

## "To the Board of Health of the State of New Jersey:

"GENTLEMEN—The committee to which was referred the communication from the board of health of the borough of Princeton, dated December 31st, 1906, desire to report that in consequence of errors in diagnosis, and also because of deception for the purpose of evading isolation restrictions, small-pox has very often been callen chicken-pox, and therefore it is desirable to include chicken-pox in the list of notifiable diseases. To eliminate questions concerning the lawful authority now existing to require reports of cases of certain infectious diseases the following bill was prepared and submitted to the legislature:

"WILLIAM M. LANNING, "HENRY MITCHELL,

"TRENTON, N. J., April 20th, 1907.

Committee."

"1. Every physician shall, in addition to the diseases named in section one of the act to which this is a supplement, within twelve hours after his first professional attendance upon any person who is suffering from or affected with malaria, tuberculosis, trachoma, rabies, glanders, anthrax or chicken-pox, report such sickness to the clerk or secretary of the local board of health having jurisdiction over the territory within which such sickness may be; or if such local board of health shall have designated some other officer thereof to receive such reports, then to such officer.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> This bill was introduced April 8th 'S. 349), but it did not become a law.

"In times of small-pox epidemic chicken-pox is occasionally notified in error as being small-pox, but, on the other hand, cases of modified small-pox or mild cases of primary small-pox in unvaccinated children are often mistaken for chicken-pox and the former disease is thereby spread. Therefore it is that during small-pox epidemics many local bodies, acting on the advice of their medical officers of health, have decided to make chicken-pox a notifiable disease. Such a course was taken in London during the recent small-pox epidemic with good results and in Liverpool, where the same course was taken, Dr. E. W. Hope found that fifty-four cases of small-pox were under treatment as cases of chicken-pox. The instances of Liverpool and London would seem to show that there is little doubt that the notification of chicken-pox is a valuable prophylactic against the spread of small-pox, but some medical officers of health take a different view. Thus Mr. F. H. May, the medical officer of health of the borough of Aston Manor, in his report of the health of that borough during 1903 states that though the question of the compulsory notification of chicken-pox was referred to him by his health committee he did not recommend such notification. His reasons are shortly as follows: Only a small percentage of cases of chicken-pox are medically attended and therefore would not be notified, for although the parent or guardian is bound to notify as well as the medical man the general public, as a rule, will not notify. Moreover, mild, modified cases of small-pox are less likely to be attended by a medical man than severe cases of small-pox. Most districts obtain from school attendance officers notifications of cases of chicken-pox medically unattended, while cases medically attended are voluntarily notified by the medical man in charge. If complete notification were secured such notification would be of little use unless the cases were verified by the medical officer of health or by specially appointed experts. Such action on the part of the medical officer of health might lead to friction. such reasoning Mr. May addressed inquiries on the point to the medical officers of health of the seventy-six large towns of England and Wales, of the twentynine county boroughs of London, and of Edinburgh, Glasgow, Dublin and Belfast, 109 in all, and received 104 replies. Chicken-pox was notifiable in fiftyfour of these 104 towns and in fifty of these fifty-four cases were visited for verification by the medical officer of health or by a specially appointed expert. Of the medical officers of health of these fifty-four towns thirty-seven consider that it is an advantage to notify chicken-pox, fifteen consider it of no advantage, and two did not reply as to this point. Our cwn opinion is that in large centers of population, at any rate, the notification of chicken-pox has a decided advantage, and the Liverpool figures are surely conclusive. There is but little risk, we fancy, that any friction would arise from the verification of doubtful cases, and, in fact, Mr. May says that many of his correspondents stated that they found that medical men were quite willing to consult with the medical officer of health as to doubtful cases. We are quite alive to the fact that many cases of chicken-pox are never seen by a medical man, but it is surely better that such cases as are seen should be notified, so that if there be any doubt about the diagnosis steps may be taken to see whether any particular case may be smallpox or not."

<sup>&</sup>lt;sup>1</sup> London Lancet, March 26th, 1904.

TABLE 47.—INFECTIOUS DISEASES REPORTED FOR EACH QUARTER DURING THE YEAR ENDING JUNE 30, 1907.

NAME OF SANITARY	D	IPHT	HER	LA.			RLET VER.			FEV	HOL		SM	TAL	L-PO	x.
DISTRICT.	1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.
Acquackanonk township Allentown borough	1.2		- 2				2									_
Allentown borough		1				****		*****						****		****
Alloway township	*****	++++++	*****		****	14914					****			+++++		****
Andover township Asbury Park city	3	*****	******		4	"ï			4	1	****			*****	*****	
Atlantic City			1		-	1	2	1		*****	1			****		****
Bayonne city	9	23	13	18	7	30		90	1		1	2		++++		
Belleville township		6														
Belmar borough	ï				1				2							
Bernards township		*****			****			min	****	****			****	****		
Beverly city Blairstown township	ř.		1		****	****			rren	*****	****		*****	*****	*****	1 - 5 - 1
Bridgeton city	23	41	19	3	7	3	16	1	5	1						
Bridgewater township		****	*****			****				1		*****			****	
Buena Vista township		******	******		3	++++		6	2	1	sirk.	*****		++++	****	
Burlington city		2				****		3	6	5						
Camden city	50	169	109	50	28	19	47	62	16	12	5	10	****	****	*****	1000
Cape May city,	200	100	105		20	1.0	9	02	2	3		10	*****	****	*****	
Carlstadt borough	*****	******					1	2		*****						
Centre township		2	******			1					1 2 2 2					
Chatham borough	****		*****	*****			++44 9	1	****	1	****	******	++++	****	*****	
Chester township (Burlington) Clementon township	****	2		ï	*****	*****		******		****	*****	*****	*****		****	
Collingswood borough	4		1		5		*****						*****			
Commercial township			*****	3			*****			*****		******	*****		*****	
Cranford township	++++		2	2	*****		13	1	.,	1		1				
Delford borough	*****			7												1
Demarest borough				2	++++	11317	1		*****		*****		****	*****	****	
Dover city East Amwell township	3				++++	3	*****	0		1	*****	144994			****	
East Greenwich township				*****	4	4	1		1	4				1		1
East Orange city East Rutherford borough	4	7	9	17	3	4	24	22	7	9	2		*****			
East Rutherford borough	1	2	*****	++++++	2	*****	*****	******	,	->++-	1		*****	.,,,,,	****	
Egg Harbor City	84	150	1.60	014	100		******	2	8	9	3	6	1	.,,,,		1000
Elizabeth city Etna borough	1	6.00	148		25	34	52	55	0	3	3	0	1			
Essex Fells borough					*****		*****	1						1	****	
	****		1		3	1				1						
Ewing township			*****		1	*****		2			1					
Fairfield township	2			*****	+>+++	****		111197	*****	*****	*****	-65***	****	****	1000	
Fairview borough Florence township				*****	*****	*****	******	******	*****		*****		****	2227	1100	
Folsom borough				******	****		*****		1	-						
Franklin township (Hunt.)		11.111			11111			433344					*****			
Franklin township (Warren)			.,,				course	*****	Comp	1	100.00	Tac 28 1				100
Freehold town	4	16		4	*****			1	2		2					
Garfield borough					3		*****		*****	****	****			****	****	100
Greenwich township (Cum.)	1	******		******	Î		1	999994	*****	****	00.250		****	****		100
Greenwich township (Warren)							4									
Hackensack city	5	7	8	7	5	5			2			1				
Hackettstown town	2			itteri	3			1	*****	2			****	++++		11.00
Haddon township	*****	2	_		1	*****		*****	1	1						100
Haddonfield borough Haddon Heights borough								1								
Hanover township	8	1			1	1		1	1		72.55					
Hardyston township	*****	2		1	****	5		4	2					****		
Harmony township	2	 5	1													
Harrison town Helmetta borough	6	3		13	1	1	12	34 16			3	2	*****	***		
Hopewell borough	****	3			9.6744	****	******	10			1			****		
Hopewell township (Mercer)							1			2		1				
Tryington fown	1	1		4	2			10	2							
Jersey City	44		134	108		105			7	56	2	1	*****		++++	
Kearny town Kingwood township	1	9		6	4		1000	26	7	100	1	1			,,,,,,	
Lakewood township	1		1 3		*****			1	me	*****	000	110000				

TABLE 47.—INFECTIOUS DISEASES REPORTED FOR EACH QUARTER DUBING THE YEAR ENDING JUNE 30, 1907—(Continued).

NAME OF SANITARY	D	IPHT	HER	IA.			RLET VER.			FE	HOI		SM	ALI	-P0	))
DISTRICT.	1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.	1.	2,	3.	1
ambertville city			2				- 5	-2	3							ľ
awrence township (Mercer)		1		*****			+++++			6						.1.
eonia borough	****	1		*****	****	1	****	******		****	++++		****	*****	****	1
odi township	1		2	·ma	+++++	,	3	2	****	in	*****		*****	*****	++***	
ong Branch city			6	8			1	12			4			*****	****	
ongport borough	0.4	*****		*****	3		*****	******	*****	****	.,,,,		*****		*****	1
ladison borough laurice River township	34	39		++++++	*****	1	******	1	****	-2	*****	******	****	****	*****	1
ledford township		3		9				******	44447	*****	1444		*****	*****	****	1
letuchen borough	1		1	ĩ		1	1	14		****						1
liddle township		8														Ì
iddletown township					*****	*****	1							*****	*****	
idland township		2														
fillville city		4		2	2	26		4	2	5	****	4				
Iontelair city	1 3	10	11	7	5	10	9	15	5	7	3	2	****	15656	****	·
loorestown borough			5	8	6	11117	12	6	2			1			****	
orristown city	1	*****	1	4	2		14	18	7	6	9	2	*****	****	*****	٠
fount Holly borough	****	*****	*****		3	acen	******	1	2400	****		2	*****	****	****	٠
lount Laurel township	149	020	329	257	71	93	001	289	770	100	770	5.1	*****	*****	****	į
ewark cityew Brunswick city	1	373	9	10	13	13	381	17	8	193	79	51			5	
lew Providence borough		,		10	10	15	20			0					****	1
orthampton township		***	4				9		*****		5		****			•
orth Bergen township				1						11.11		*****				
orth Plainfield borough	1	3		3	1	2	3			4		1				
orwood borough	****	1							*****			*****				
akland borough	*****		*****			*****			*****	1	****	*****	*****			
aklyn borough	1				****	rren			teen						****	
range city	11	9	11	9	14	44	37	52	5	4	2	2				ė
almyra township	+1144							3	*****	****	43.634	44+15	****	*****	****	
assaic city	6	3		72	25	57	3		30	58		2	****	*****	****	f
aterson city aulsboro borough	40	115	72	12	20	57	90	- 66	90	18	2	1	+111		*****	٩
ennington borough	****		+++++				1			****				*****		
erth Amboy city	46		7	17707	1	*****	56		3	1	3					j
iscataway township	144		1				44			1					100	į
itman borough		5							3	1						
lainfield city	4	6	4	14	*****	4	17	18	8	6	1	1	*****			
leasantville borough			3	******		****	2		*****	*****		*****	*****			ļ
rinceton borough	3	1			3	4	10	11		1			*****			·
andolph township	****	*****			1	3										
ed Bank town	*****	*****		+++ ++	*****	4	*****	inner		41110	****	*****	11144	****	****	٠
idgewood village	ï	*****		+++++	11111	****	+++++	******	1	F1191	*****	*****	++++	444.50		*
iverside borough				2	1	1	******		*****	i		*****	*****	,,,,,		ŕ
iverton borough oselle Park borough	***	110 11		-			1						*****	*****	*****	١
alem city	14	18	3	2	9		î	1	6				1			Ì
ayreville township		10						î					*****	*****		•
omerville town		1		2	4	2		16		3		2				
outh Brunswick township					****		3						*****	****		
outh Orange township			1	20110	++++		+++++	1	6	*****			****	****		
outh Orange village	1		2		*****	1	9	9	15	2	1	1	*****	*****		
outh River borough	++++	22	6	2	24,00			12								
pringfield township (Union)	1			******	+++++	*****	+15115	*****	*****	****	****		** 1.47			٠
pring Lake borough				******	++++		*****	*****	1	****	7444	*****	****	++++	****	,
tow Creek township	*****	1 5		6	2	*****		******	6	*****	*****	.,,,	*****	*****	*****	•
ummit city	1	0	2	- 6	1 2	1	1		0	*****						٠
ussex borough wedesboro borough			3	*****			4	44444	*****	*****	*****			*****		_
enafly borough			0				******	3		*****	49440		*****	*****		
renton city	26	49	39	24	25	30	40		62	31	47	46		*****		
nion township (Hunterdon)					*****	1		*****					inn	*****		
nion township (Union)	1	3		1			1	1	4444	*****	++++		****	1000	****	
pper Pittsgrove township		*****			1											
	11007	7	. 1	3	20114	3	1	2	4	1	3					
ineland borough	*****	1 .	( A			1										
ineland borough oorhees townshipVantage township			1		*****		1			*****	****	3	*****	11114	4566	*

TABLE 47 —INFECTIOUS DISEASES REPORTED FOR EACH QUARTER DURING THE YEAR ENDING JUNE 30, 1907—(Continued).

NAME OF SANITARY	r	тнчт	HER	IA.			RLE'			FE	HOIVER		SM	[AL]	,-P0	x.
DISTRICT,	1.	2.	3.	4.	1.	2,	3.	4.	1.	2.	3.	4.	1.	2,	3.	4.
Washington borough																
Washington township (Berg.)		*****			****	Little			1			*****	****		43.044	
Washington township (Glou.)					1	****		25,4127		2		11111-	11440	*****		4444
West Amwell township			1		1	****			*****	****		1			****	
West Deptford township	*****	*****	1		*****		1			****						
Westfield township				1	*****		6 5	13	31174	1110	2 3	- 1	74664	****	49.44	***
West Hoboken town			10	35	8	3	0	52	1 3	1	3	444414	+1110	*****	71110	
West Orange township Westwood borough			1			0	1		0	2		******	*****			
Woodbine borough									,,,,,,,			333454	****			
Woodstown borough	*****	******	-		****	14114			->++	33149	****	1	****	*****	11111	****
W Oodstown borough,		******	******		-9990	1444	1.1111	900	77774				4110		11134	1000
Total cases reported by quar-		1000			015				0.10		100	4.00				
Total cases reported for year.	644	1332	1043	1048	345		1113	3241	342	492	196	160 1190	6		9	13

Laboratory Diagnosis.—The bacteriological examination of specimens of diseased tissues for diagnosis is conducted in the State laboratory of hygiene under the direction of Mr. R. B. Fitz-Randolph. A detailed statement of the service rendered in this department will be found further on in this report. The following table shows the yearly increase in the number of specimens examined:

TABLE 48.—SHOWING THE NUMBER OF SPECIMENS OF EACH KIND EXAMINED SINCE THE LABORATORY WAS ORGANIZED.

	1896-97.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
Diphtheria	627 258 27	600 516 175 4 18	577 766 339 *	974 892 431 53 30	1,864 1,211 739 113 23	1,487 1,467 884 196 55	2,090 1,853 1,333 151 132	2,949 2,344 1,272 98 67	2,691	2,948 1,556 126	3,348 3,402 1,975 149 119
Totals	914	1,313	1,682	2,380	3,955	4,089	5,559	6,730	7,048	8,033	8,993

<sup>\*</sup>The number of these specimens has not been recorded.

Food and Drugs.—For the purpose of causing the regulations governing the sale of food and drugs in New Jersey to correspond closely with those of the Federal government, the act approved May 20th, 1907, was passed, but to meet the demands of manufacturers of certain articles the law will remain inoperative until October

1st, 1908. Until that date the act approved March 21st, 1901, will continue in full force, and inspections will proceed as heretofore during the coming year. During the year ending October 31st, 1907, the number of inspections of milk was largely in excess of the inspections made during the previous year. The number of samples of milk and cream sent to the State laboratory of hygiene for analysis was 2,838, but this number represents only that portion of the inspected samples which, in the judgment of the inspector, gave some evidence of adulteration. As the inspectors become more and more skillful in judging of the quality of milk by its appearance and by the use of the lactometer, a smaller proportion of samples is forwarded to the laboratory for the determination of solids and fat, and unnecessary expenses for packing, icing and expressage are thereby avoided. The number of articles of food received and examined in the laboratory during the year was 3,605, and the number found to be below the standard fixed by law was 696, or 18 per cent. The number of specimens of drugs analyzed was 571, and the number found to be adulterated was 367, or 64 per cent. The number of cases in which the evidence was believed to be sufficient to secure a conviction, and in which cases suit was begun, was 362. The following table shows the disposition made of each case. The amount of penalties paid to the State treasurer for violations of the food and drug law for the past seven years has been as follows: 1901, \$3,000.00; 1902, \$4,900.00; 1903, \$5,500.00; 1904, \$4,308.30; 1905, \$6,462.48; 1906, \$7,462.48; 1907, \$8,553.68. These sums do not constitute a criterion by which the degree of activity with which the law has been enforced can be judged, for the object in view is to prevent the sale of adulterated and unwholesome articles, and this end is accomplished by warning notices in many cases, without prosecution. port of Mr. R. B. Fitz-Randolph, which is forwarded herewith, presents a detailed account of the work performed in the laboratory. Attention is particularly drawn to the results of the examination of samples of tincture of iodine. Three hundred and eleven specimens of this preparation were received in the laboratory, and 249 were found to be below the legal standard. As this article is in almost all cases prepared by the druggist himself, the extensive adulteration which is disclosed by the laboratory investigations cannot be charged, as in the case of some other remedies, to the manufacturer, wholesaler or jobber.

TABLE 49.—SHOWING THE NUMBER OF SUITS INSTITUTED FOR VIOLATION OF THE ACT TO PREVENT THE SALE OF ADULTERATED FOOD AND DRUGS, TOGETHER WITH THE DATE OF ANALYSIS OF SAMPLE AND THE DISPOSITION OF THE CASE, FOR THE YEAR ENDING OCTOBER 31, 1907.

r	Date of analysis.	Number of sample.	Name of article.	Termination of each case.
Nov.	1, 1906	A -6366	Milk	Convicted, fine paid.
Nov.	3, 1906			Suit discontinued.
Nov.	5, 1906		Milk	Convicted, fine paid.
Nov.	6, 1906			Convicted, fine paid.
Nov.			Milk	Convicted, fine paid.
Nov.			Milk	Convicted, fine paid.
Nov.			Milk	Paid penalty.
Nov.			Milk	Convicted fine paid.
Nov.	9, 1906	A -6385	Milk	Paid penalty.
Nov.	9, 1906	A -6387	Milk	Convicted, fine paid.
Nov.	10, 1906	G -9	Milk	Paid penalty.
Nov.	10, 1906	G -18	Milk	Pending.
Nov.	14, 1906	A -64/1	Milk	Convicted, fine paid.
Nov.	14, 1906	A -6472	Milk	Defendant not found.
Nov.	15, 1906	C -7825	Milk	Convicted, fine paid.
Nov.	15, 1906	C -7827	Milk	Convicted, fine paid.
Nov.	15, 1906	G -31	Milk	Convicted, fine paid.
Nov.	21, 1906	D-8134	Milk	Paid penalty.
	21, 1900	D -8130	Milk	Paid penalty.
Nov.	21, 1900	D -9130	Milk	Paid penalty.
Nov.			Milk	Pending.
Nov.	27, 1906		Milk	Paid penalty.
Nov.	28, 1906 28, 1906	D-8149		Convicted, fine paid.
Nov. Dec.	1, 1906	D -0102	Milk	Acquitted, appealed.
Dec.	6, 1906	0 7007		Convicted, fine paid.
Dec.	7, 1906	A 6575	Milk	Paid penalty.
Dec.	7, 1906	A -6578	Milk	Paid penalty.
Dec.	13, 1906			Suit discontinued.
Dec.		A -6579	Milk	Paid penalty.
Dec.	14, 1906		Milk	Paid penalty.
Dec.		G -95	Milk	Paid penalty.
Dec.	19, 1906		Milk	Convicted.
Dec.		A -6628	Milk	Paid penalty.
Dec.	20, 1906		Milk	Convicted, fine paid.
Jan.	5, 1907		Milk	Paid penalty.
Jan.	9, 1907	A -6702	Milk	Paid penalty.
Jan.	15, 1907			Suit discontinued.
Jan.	16, 1907	D -8194	Butter	Convicted, fine paid.
Jan.	17, 1907			Convicted, fine paid.
Jan.			Butter	Convicted.
Feb.			Milk	Paid penalty.
Feb.	8. 1907		Butter	Convicted.
Feb.			Butter	Defendant not found.
Feb.	13, 1907	D-8230	Butter	Convicted.
Feb.	13, 1907	D-8231	Butter	Convicted.
Feb.	13. 1907	D-8233	Butter	Convicted, appealed.
Feb.	13, 1907	D-8234	Butter	Duplicate of D-8233.
Feb.	13, 1907	D-8235	Butter	Convicted.

TABLE 49.—SHOWING THE NUMBER OF SUITS INSTITUTED FOR VIOLATION OF THE ACT TO PREVENT THE SALE OF ADULTERATED FOOD AND DRUGS, TOGETHER WITH THE DATE OF ANALYSIS OF SAMPLE AND THE DISPOSITION OF THE CASE, FOR THE YEAR ENDING OCTOBER 31, 1907—(Continued).

	ate of analysis.	Number of sample.	Name of article.	Termination of each case.
Feb.	14, 1907	D-8232	Cider vinegar	Settled.
Feb.	15, 1907	D-8253	Milk	Pending.
Feb.	15, 1907		Butter	Convicted.
Feb.	16, 1907	C -8103	Tincture iodine	Convicted, fine paid.
Feb.		C -8108	Milk	Paid penalty.
Feb.		D-8272	Milk	Convicted, fine paid.
Mar.	2, 1907	D-8287	Butter	Convicted, appealed.
Mar.	8, 1907		Butter	Acquitted.
Mar.		A -6964	Butter	Convicted, appealed.
Mar.	13, 1907	A - 6977	Butter	Convicted, appealed.
Mar.	13, 1907		Butter	Convicted, appealed.
Mar.	13, 1907		Butter	Convicted, fine paid.
Mar.	13, 1907		Butter	Convicted.
Mar.	13, 1907	A -7030	Butter	Convicted, fine paid.
Mar.	13, 1907	A -7033	Butter	Convicted.
Mar.	13, 1907	A -7037	Butter	Convicted.
Mar.	13, 1907	D-8295	Camphor liniment	Pending.
Mar.	13, 1907	D-8307	Butter	Convicted.
Mar.	13, 1907	D -8308	Butter	Convicted, appealed.
Mar.	13, 1907	D-8310	Butter	Convicted, appealed.
Mar.			Butter	Convicted, fine paid.
Mar.	19, 1907	A -7041	Butter	Convicted, appealed.
Mar.			Butter	Convicted, fine paid.
Mar.			Milk	Paid penalty.
Mar.			Milk	Convicted, fine paid.
Mar.	27, 1907	A -7091	Milk	Paid penalty.
Mar.			Milk	Paid penalty.
Mar.	30, 1907		Milk	Convicted, fine paid.
Mar.			Milk	Paid penalty.
Mar.			Milk	Paid penalty.
Apr.	1, 1907	C -8268	Oleomargarine	Defendant not found.
Apr.	1, 1907		Butter	Convicted, appealed.
Apr.	1, 1907			Convicted, appealed.
Apr.	3, 1907		Milk	Paid penalty.
Apr.	3, 1907			Convicted, appealed.
Apr.	12, 1907 13, 1907		Milk	Convicted.
Apr.			Butter	Paid penalty. Convicted, appealed.
Apr.			Butter	Convicted, appealed.
Apr.	15, 1907		Butter	Convicted.
Apr.			Butter	Convicted, appealed.
Apr.			Butter	Convicted, appealed.
Apr.	15, 1907	D-8399	Butter	Convicted, appealed.
Apr.			Butter	Convicted, appealed.
Apr.			Oleomargarine	Convicted, fine paid.
Apr.	19, 1907,	C -8346	Oleomargarine	Convicted, fine paid.
Apr.			Butter	Convicted, appealed.
Apr.			Butter	
Apr.	24, 1907	D-8413	Butter	Convicted, appealed.

TABLE 49—SHOWING THE NUMBER OF SUITS INSTITUTED FOR VIOLATION OF THE ACT TO PREVENT THE SALE OF ADULTERATED FOOD AND DRUGS, TOGETHER WITH THE DATE OF ANALYSIS OF SAMPLE AND THE DISPOSITION OF THE CASE, FOR THE YEAR ENDING OCTOBER 31, 1907—(Continued).

I	Pate of analysis.	Number of sample.	Name of article.	Termination of each case.
Apr. Apr. Apr.	26, 1907 26, 1907 30, 1907	D-8423 D-8424 C-8375	MilkMilk	Paid penalty. Paid penalty. Convicted, fine paid.
May May May	1, 1007 3, 1907 3, 1907	D -8443 C -8384 D -8446 D -8448	Butter Milk Milk	Convicted, appealed. Paid penalty. Paid penalty. Convicted, fine paid.
May May May May	3, 1907 4, 1907 4, 1907 4, 1907	D -8439 G -251 D -8142	Butter Butter Oleomargarine	Convicted, appealed. Convicted, appealed. Pending.
May May May May	4, 1907 4, 1907 7, 1907 10, 1907	D -8441 D -8451 C -8401 C -8405	Oleomargarine Milk	Duplicate of D-8442. Pending. Paid penalty. Convicted.
May May May May	10, 1907 10, 1907 10, 1907 10, 1907	D-8456 C-8412	MilkOleomargarine	Pending. Paid penalty. Convicted. Convicted, appealed.
May May May	10, 1907 13, 1907 24, 1907	A -7184 D -8452 C -8473	Butter Oleomargarine Butter	Convicted, fine paid. Defendant not found. Convicted, fine paid.
June June June June	6, 1907 6, 1907 6, 1907 7, 1907	D -8487 A -7330 D -8491	MilkMilk	Convicted, fine paid. Duplicate of D-8486. Paid penalty. Suit discontinued.
June June June June	12, 1907 12, 1907		MilkMilkMilkMilk	Convicted, fine paid. Duplicate of D-8503. Pending. Paid penalty.
June June June	25, 1907 25, 1907 27, 1907	D -8518 C -8589 C -8612	Milk Milk Milk	Suit discontinued. Convicted, fine paid. Paid penalty.
June July July July	28, 1907 5, 1907 6, 1907 10, 1907		MilkMilkMilkMilk	Paid penalty. Pending. Paid penalty. Paid penalty.
July July July July	10, 1907 10, 1907 10, 1907 10, 1907	A -7463	Milk Milk Milk Milk	Convicted, fine paid. Paid penalty. Paid penalty. Paid penalty.
July July July	10, 1907 10, 1907 10, 1907	A -7478 A -7474 A -7475	Milk Milk Milk	Pending. Convicted, fine paid. Paid penalty.
July July July July	10, 1907 10, 1907 11, 1907 11, 1907	C -8692 D -8595 D -8598	MilkMilkMilkMilkMilkMilkMilk	Convicted, fine paid. Paid penalty. Convicted, fine paid. Paid penalty.
July July	12, 1907	D-8604	Milk	Convicted, fine paid. Paid penalty.

TABLE 49.—SHOWING THE NUMBER OF SUITS INSTITUTED FOR VIOLATION OF THE ACT TO PREVENT THE SALE OF ADULTERATED FOOD AND DRUGS, TOGETHER WITH THE DATE OF ANALYSIS OF SAMPLE AND THE DISPOSITION OF THE CASE, FOR THE YEAR ENDING OCTOBER 31, 1907—(Continued).

D	ate of analysis.	Number of sample.	Name of article.	Termination of each case.
July	13, 1907	H-21	Milk	Paid penalty.
July	17, 1907		Milk	Convicted.
July	17, 1907		Milk	Convicted.
July	17, 1907		Milk	Convicted,
July	17, 1907			Convicted, fine paid.
July	17, 1907		Milk	Convicted, and parq.
July	17, 1907	G-306	Milk	
July	19, 1907	D-8651	Milk	Convicted, fine paid.
July	19, 1907		Cream	Convicted, fine paid.
July	19, 1907		Milk	Convicted, fine paid.
July	19, 1907		Milk	Convicted
July	19, 1907			Convicted.
July	19, 1907		Milk	Paid penalty
July	19, 1907	G -325	Milk	Convicted, fine paid.
July	19, 1907	G-326	Milk	Paid penalty.
July	19, 1907			Convicted.
July	22, 1907		Milk	Paid penalty.
July	24, 1907		Milk	Pending.
July	24, 1907			Paid penalty.
July	24, 1907	C -8784		Convicted, fine paid.
July		C -8790	Milk	Paid penalty.
July	24, 1907		Cream	Convicted, fine paid.
July	24, 1907	D-8705	Cream	Convicted, fine paid.
July	24, 1907	G-359	Milk	Paid penalty.
July			Cream	Convicted.
July	25, 1907	C -8812	Milk	Paid penalty.
July	25, 1907	C -8816	Milk	Paid penalty.
July	25, 1907	D-8715	Milk	Convicted, fine paid.
July	25, 1907	D-8717	Milk	Convicted, fine paid.
July	30, 1907	IC -8835	Milk	Paid penalty.
July	30, 1907	G-394	Milk	Paid penalty.
July	30, 1907	<del>G</del> -395	Milk	Paid penalty.
July	30, 1907	G-398	Milk	Paid penalty.
July	30, 1907	G-400	Milk	
July	30, 1907	G-409	Cream	Convicted.
July			Cream	Convicted, fine paid
July			Cream	Duplicate of D-8744.
July	31, 1907		Milk	Paid penalty.
July	31, 1907	D -8737	Milk	Paid penalty.
July	31, 1907	D-8742	Milk	Paid penalty.
July			Cream	
July	31, 1907	D <i>-</i> 8751	Cream	Convicted.
July	31, 1907	D-8755	Milk	Convicted, appealed.
Aug.	1, 1907	G -438	Milk	Convicted.
Aug.	2, 1907	C -8882	Milk	Convicted, fine paid.
Aug.	2, 1907	D-8765	Cream	Convicted, fine paid.
Aug.	6, 1907	D-8605	Tincture iodine	Convicted.
Aug.	6, 1907	D-8609	Tincture iodine	Pending.
Aug.	6. 1907	'G -295	Tincture iodine	Pending.

TABLE 49.—SHOWING THE NUMBER OF SUITS INSTITUTED FOR VIOLATION OF THE ACT TO PREVENT THE SALE OF ADULTERATED FOOD AND DRUGS, TOGETHER WITH THE DATE OF ANALYSIS OF SAMPLE AND THE DISPOSITION OF THE CASE, FOR THE YEAR ENDING OCTOBER 31, 1907—(Continued).

Date of analysis.		Number of sample.	Name of article.	Termination of each case.
Aug.	6, 1907	G-309	Tincture iodine	Pending.
Aug.	6, 1907	G-310	Tincture iodine	Pending.
Aug.	7, 1907	A -7482	Milk	Settled.
Aug.	7, 1907	A -7487	Milk	Convicted.
Aug.	7, 1907	A -7490	Milk	Suit discontinued.
Aug.	7, 1907	A -7494	Milk	Settled.
Aug.		A -7496	Milk	Settled.
Aug.	7, 1907	A -7497	Milk	Paid penalty.
Aug.	7, 1907	A -7525	Milk	Settled.
Aug.	7, 1907	A -7526	Milk	Suit discontinued.
Aug.	7, 1907	A -7529	Milk	Settled.
Aug.	7, 1907	A -7530	Milk	Paid penalty.
Aug.	7, 1907		Tincture iodine	
Aug.	7, 1907		Tincture iodine	
Aug.	7, 1907	D-8684	Tincture iodine	Pending.
Aug.	7, 1907	G-294	Tincture iodine	Pending.
Aug.	7, 1907	G -296	Tincture iodine	Pending.
Aug.	7. 1907	G -312	Tincture iodine	Pending.
Aug.	7, 1907	G-315	Tincture iodine	Pending.
Aug.	7, 1907	G -322	Tincture iodine	Pending.
Aug.	7, 1907	G-323	Tincture iodine	Pending.
Aug.	8, 1907	C -8905	Milk	Paid penalty.
Aug.	8, 1907	C -8908	Milk	Convicted, fine paid.
Aug.	8, 1907	C -8910	Milk	Paid penalty.
Aug.	8, 1907	G-489	Milk	Paid penalty.
Aug.	8, 1907	D-8687	Tincture iodine	Pending.
Aug.	8, 1907	D -8689	Tincture iodine	Pending.
Aug.	8, 1907	D-8690	Tincture iodine	Pending.
Aug.	8, 1907	D-8693	Tincture iodine	Pending.
Aug.	8, 1907	G -341	Tincture iodine	Pending.
Aug.	8, 1907	G -342	Tincture iodine	Pending.
Aug.	8, 1907	G -351	Tincture iodine	Pending.
Aug.	9, 1907	C -8935	Milk	Paid penalty.
Aug.	9, 1907	G -508	Milk	Convicted, fine paid.
Aug.	12, 1907	C -8938	Butter	Convicted, fine paid.
Aug.	13, 1907	A -7504	Milk	Paid penaity.
Aug.	14, 1907	C -8948	Milk	Settled
Aug.	14, 1907	G -040	Milk	Paid penalty.
Aug.			Milk	
Aug.			Milk	
			Milk	Paid penalty.
	15, 1907	G 569	Milk	Paid penalty. Convicted, fine paid.
Aug.	10, 1807	C 9079	Milk	Doid namelts
Aug.	10, 1007	C -0913	Milk	Convicted, fine paid.
Aug.	90 1007	C -8004	Milk	Convicted, fine paid.
Aug.	90 1007	C -8008	Milk	Pending
Aug.	90 1007	C -8007	Milb	Duplicate of C-8996.
Aug. Aug.	90 1007	C -0004	Milb	Convicted, fine paid.

TABLE 49.—SHOWING THE NUMBER OF SUITS INSTITUTED FOR VIOLATION OF THE ACT TO PREVENT THE SALE OF ADULTERATED FOOD AND DRUGS, TOGETHER WITH THE DATE OF ANALYSIS OF SAMPLE AND THE DISPOSITION OF THE CASE, FOR THE YEAR ENDING OCTOBER 31, 1907—(Continued).

1	Date of analysis.	Number of sample.	Name of article.	Termination of each case.
Aug.	20, 1907	C -9004	Milk	Pending
Aug.	20, 1907	C -9011	Milk	Suit discontinued.
Aug.			Milk	
Aug.	21, 1907	A -7581	Milk	Paid penalty.
Aug.	21, 1907	A -7584	Milk	Convicted, fine paid.
Aug.	21, 1907	C -9015	Milk	Paid penalty.
Aug.	21, 1907	G-588	Milk	Paid penalty.
Aug.	21. 1907	G-591	Milk	Paid penalty.
Aug.	21, 1907	D-8807	Milk	Paid penalty.
Aug.	21, 1907	D-8809	Milk	Convicted, fine paid.
Aug.			Milk	
Aug.			Milk	
Aug.	21, 1907	D-8812	Milk	Convicted, fine paid.
Aug	21, 1907	D-8813	Milk	Duplicate of D-8812.
Aug.	22, 1907	D-8818	Milk	Paid penalty.
Aug.	22, 1907	D-8819	Milk	Convicted, fine paid.
Aug.	22, 1907	D-8820	Milk	Paid penalty.
Aug.	22, 1907	G-596	Milk	Suit discontinued.
Aug.	<b>22</b> , 1907	G-599	Milk	Duplicate of G-596.
Aug.	23, 1907	D-8832	Milk	Pending.
Aug.	27, 1907	G-608	Milk Tincture iodine	Convicted.
Aug.	27, 1907	D-8746	Tincture iodine	Pending.
Aug.	27, 1907	D-8708	Tincture iodine	Pending.
Aug	27, 1907	D <i>-</i> 8710	Tincture iodine	Pending.
Aug.	27, 1907	D <i>-</i> 8711	Tincture iodine Tincture iodine Tincture iodine	Pending.
Aug.	27. 1907	ID-8713	Tincture indine	Pending.
Aug.	27, 1907	D-8714	Tincture iodine	Pending.
Aug.	27, 1907	G -371	Tincture iodine Tincture iodine Tincture iodine	Pending.
Aug.	27, 1907	G <b>-3</b> 73	Tincture iodine	Pending.
Aug.	27, 1907	G-492	Tincture iodine	Pending.
Aug.	29, 1907	D-8846	Milk	Convicted.
Aug.	29, 1907	D-8848	Milk	Convicted.
Aug.	29, 1907	D-8849	Milk	Duplicate of D-8848.
Aug.	29, 1907	G-622	Milk	Pending.
Aug.	30, 1907	G-625	Milk Tincture iodine	Settled.
Aug.	30, 1907	D-8797	Tincture iodine	Pending.
Aug.	30, 1907	G -500	Tincture iodine	Pending.
Aug.	30, 1907	G -547	Tincture iodine	Pending.
Aug.	31, 1907	D-8850	Milk	Convicted, fine paid.
Aug.	31, 1907	D -8851	Milk	Duplicate of D-8850.
Aug	31, 1907	G-627	Milk	Convicted, fine paid.
Sept.	2, 1907	D -8858	Milk	Convicted.
Sept.	<b>2</b> , 1907	D-8860	Milk	Convicted.
Sept.	3, 1907	D-8802	Tincture iodine	Pending.
Sept.	3, 1907	D -8803	Tincture iodine	Pending.
Sept.			Tincture iodine	
Sept.	3, 1907	G-580	Tincture iodine	Pending.
Sept.	3, 1907	G-581	Tincture iodine	Pending.
Sept.	3, 1907	<del>U -584</del>	Tincture iodine	Pending.

TABLE 49.—SHOWING THE NUMBER OF SUITS INSTITUTED FOR VIOLATION OF THE ACT TO PREVEST THE SALE OF ADULTERATED FOOD AND DRUGS, TOGETHER WITH THE DATE OF ANALYSIS OF SAMPLE AND THE DISPOSITION OF THE CASE, FOR THE YEAR ENDING OCTOBER 31, 1907—(Continued).

D	ate of analysis.	Number of sample.	Name of article.	Termination of each case.
Sept.	3, 1907	G -585	Tincture iodine	Pending.
Sept.	3, 1907	G-602	Tincture iodine	Pending.
Sept.	3, 1907	G-603	Tincture iodine	Pending.
Sept.	3, 1907		Tincture iodine	Pending.
Sept.	6. 1907	C -9122	Milk	Pending.
Sept.	6, 1907	D_8868	Milk	Convicted.
Sept.	6, 1907		Milk	Duplicate of D-8868.
Sept.			Milk	Pending.
Sept.	6, 1907		Milk	Settled.
Sept.	6, 1907		Tincture iodine	
Sept.			Tincture iodine	Pending. Pending.
Sept.	6. 1907	G 681	Tincture iodine	
Sept.	7, 1907	A 760E	Milk	Pending.
Sept.	7, 1907	A 7800	MIII K	Paid penalty.
		A 7494	Milk	Settled.
Sept. Sept.	7, 1907		Milk	Paid penalty.
				Settled.
Sept.	7 1007	A -/041	Milk	Paid penalty.
Sept.	7 1007	C -8199	Milk	Suit discontinued.
Sept.	7 1007	C -9138	Milk	Paid penalty.
Sept.	10 1007	U -9141	Milk	Pending.
Sept.	10, 1807	A -7000	Milk	Convicted.
Sept.	10, 1907	C -8107	Skim milk	Settled.
Sept.			Milk	Convicted, fine paid.
Sept.	10, 1907	G -003	Milk	
Sept.	10, 1907	D-8870	Tincture iodine	Pending.
Sept.	10, 1907	D-8878	Tincture iodine	Pending.
Sept.	11, 1907	C -9176	Tincture iodine Milk Milk	Pending.
Sept.	13, 190/	C -9197	Milk	Paid penalty.
Sept.			Milk	
Sept.	13, 1907	G-669	Milk	Paid penalty.
Sept.	13, 1907	D-8878	Milk	Pending.
Sept.	13, 1907	D-8879	Milk	Paid penalty.
Sept.	13, 1907	G -673	Tincture iodine	Pending.
Sept.			Milk	Convicted, fine paid.
Sept.	18, 1907	A -7686	Milk	Duplicate of A-7685.
Sept.	18, 1907	C -9204	Tincture iodine	Pending.
Sept.	20, 1907	D-8888	Milk	Paid penalty.
Sept.	20, 1907	D-8887	Milk	Settled.
Sept.	20, 1907	D -8889	Milk	Convicted.
Sept.	27, 1907	G-681	Tincture iodine Tincture iodine	Pending.
Sept.	27, 1907	G-684	Tincture iodine	Pending.
Oct.	2, 1907	G-693	Tincture iodine	Pending.
Oct.	2, 1907	G-694	Tincture iodine	Pending.
Oct.	2, 1907	G-698	Tincture iodine	Pending.
Oct.	2, 1907	G-701	Tincture iodine	Pending.
Oct.	2, 1907	G-707	Tincture iodine	Pending.
Oct.	2, 1907	. G -708	Tincture iodine	Pending.
Oct.	3. 1907	C -9233	Skim milk	Pending.
Oct.	3, 1907	C -9232	Skim milk	Duplicate of C-9233.

TABLE 49.—SHOWING THE NUMBER OF SUITS INSTITUTED FOR VIOLATION OF THE ACT TO PREVENT THE SALE OF ADULTERATED FOOD AND DRUGS, TOGETHER WITH THE DATE OF ANALYSIS OF SAMPLE AND THE DISPOSITION OF THE CASE, FOR THE YEAR ENDING OCTOBER 31, 1907—(Continued).

Date of analysis.		Number of sample.	Name of article.	Termination of each case.
Oct. Oct. Oct. Oct. Oct. Oct. Oct. Oct.	10, 1907	C -9258 C -9260 C -9264 C -9268 C -9269 H -65 C -9246 C -9249 H -68 D -8914 D -8917	Milk	Settled. Pending. Duplicate of C-9257. Duplicate of C-9257. Pending. Pending. Pending. Duplicate of C-9268. Pending. Settled.
Oct. Oct. Oct.	25, 1907 28, 1907 28, 1907 28, 1907	B -4751 B -4753	MilkMilkMilk	Pending. Pending. Pending. Pending.

Creameries.—The number of licensed creameries in the State is 133; of this number, twenty-two were originally occupied as dwellings, but only two are now occupied in this manner. Licenses have been refused in the case of five of these establishments because the owners or lessees have failed to meet the requirements of the law. Suits have been begun for violation of section 1 of chapter 139 of the laws of 1906, as follows: George H. Scott, Baptistown; Buzby & Miller, Woodstown; William Richman, Salem. Further on in this report is a statement of conditions which exist on creamery premises. establishments for the sale of milk in cities and the larger towns not only sell milk by the pint and quart, but also dispose of it in can lots, and the question whether these places are included in the definition contained in section 6 of the act approved April 20th, 1906, has not yet been judicially decided. These depots are usually located in thickly built-up portions of the city, often in stores in tenements, and if the act above referred to is operative in the case of these places they would be required to remove their places

of business to other buildings. Inasmuch as the sale of milk in these establishments can be controlled by ordinances made by local boards of health, unsanitary conditions which have been observed on these premises by the inspectors of this board have been brought to the attention of the local board having jurisdiction in the locality.

Inspection of Streams.—The terms of the opinion of the Court of Appeals in the case of the State board of health v. the borough of Vineland, which was rendered in June, 1907, do not affect the operations of the board except where plans for the discharge of sewage into streams has been approved by the State sewerage commission. The text of the opinion is published further on in this report. By the advice of the Attorney-General, the inspection of streams by the board was discontinued upon the announcement of the decree of Vice Chancellor Leaming, but the work was resumed after the filing of the decision of the Court of Appeals, and since that time investigations have been regularly made concerning the purity of public water-supplies.

Notices have been sent drawing attention to one hundred and forty sources of pollution, and suits have been ordered in all cases where the parties responsible for maintaining the nuisance failed to take action to remove the sources of contamination. A detailed statement of the pollutions detected is included in this report.

Sanitary Inspection Service.—At the meeting of the State sanitary examiners held in December, 1906, eleven applicants for license to serve as health officer and twenty to serve as sanitary inspectors were examined, and at the meeting held in June, 1907. twenty-six were examined, three for health officer's license and twenty-three for that of inspector. Of the total number, ten were The quality of the local sanitary service in New Jersey has greatly improved in consequence of the work already accomplished under the provisions of the act of 1903, and it is upon the service of the officials appointed under the restrictions contained in this act that dependence is mainly placed for further improvement in the local sanitary administration in New Jersey, but before the best attainable service can be procured, higher salaries and long tenure of office must be offered. Sanitary inspectors should not only be tested for fitness by examination, but a thorough and comprehensive course of instruction should be provided, and

health officers should be chosen only from among a class of highly educated and especially prepared individuals.

Local Sanitary Administration.—Questions are still arising concerning the duty of the local board of health and the responsibility of the householder in cases where disinfection of dwellings is to be performed to prevent the spread of infectious diseases. Disinfection, if it is to serve any useful purpose, must be skillfully applied. and therefore it should always be conducted by or under the personal supervision of a trained employe of the local sanitary authority, and never left to the unaided efforts of persons who are unacquainted with the purpose of each step in the process. Moreover, inasmuch as this procedure is employed, in almost all instances, for the protection of the public and not for the benefit of the householder, it should be performed at public expense and by a representative of the local health department. Ordinances governing this matter should hold the householder responsible for prompt notification of the proper officials when the infectious patient has recovered or has been removed, and the householder should be penalized if he permits persons who are not needed as attendants to enter or leave the infected dwelling before it has been treated and released by the health officer, but he cannot be relied upon to possess that degree of knowledge of the measures which are to be depended upon for germicidal effects, and of which it must be admitted many of the employes of health boards are still innocent. Therefore it is inadvisable for any sanitary authority to shirk its duty if disinfection is to be done, and preparation for this work should be made by every local health board. At least one inspector should be instructed and drilled in the various procedures which are essential to the purification of infected articles and which are appropriate for the rational application of the knowledge thus far gained concerning the avenues through which infection is spread. There is reason to hope that in course of time the enforcement of

¹ In Prussia during 1905 about sixty-four official nine-day courses of lectures on practical disinfection were given at seventeen different points; 533 persons attended the lectures and 533 passed the examinations and received certificates as officially tested disinfectors. Besides the above courses a number of three-day courses were held for nurses, and about 200 nurses were thus trained for the disinfecting service, especially for continuous bedside disinfection, while the licensed disinfectors were trained especially for the terminal disinfection. Every three years the licensees must submit to further tests, and take another course of lectures at the end of six years.—Jour. A. M. A., April 20th, 1907.

the act requiring that all sanitary inspectors and health officers who are hereafter appointed shall be tested for fitness, will bring to the service of every sanitary district a well informed and capable agent who can be trusted to employ disinfection whenever it can reasonably be expected to destroy the organisms which may reproduce disease, and who will also be wise enough to refrain from needless efforts in this direction.

The ventilation of public buildings, especially churches and public halls, is worthy of much more attention than it receives at the hands of local health officers. Serious difficulty is encountered by architects in efforts to prescribe adequate provision for the admission into these structures of a sufficient supply of properly warmed fresh air in cold weather, and janitors are inclined to close. the air exits during the warming-up period, often forgetting to open them after the audience has assembled. But many of these buildings are in need of radical changes in the provisions which have been made for the admission of pure air and the discharge of that which has been breathed, and inspections for determining these questions should be assigned to competent persons, preferably architects, especially employed for this service. Uniformity in the practice of local boards of health concerning the closing of schools. churches and public assemblies for the purpose of restricting the spread of infectious diseases has not yet been secured, and ill-advised action in this particular has been taken in several localities during the past year. Possibly conditions may sometimes exist which will justify the closing of public schools, but such occasions are at least extremely rare. School buildings and all of their contents can be freed from the infection of diphtheria every day during an outbreak of this disease, and probably the same fact applies to scarlet fever, and the cost of this work should not deter school authorities from causing it to be done. Daily medical inspection of the teachers and pupils during the prevalence of diphtheria and scarlet fever will promptly weed out the infected individuals, and with these precautions, school attendance may be rendered safer for the children than unrestricted contact in the streets.

Infectious Diseases of Animals.—The State has been free from anthrax during the past year, no case of that disease having occurred since August, 1906. Similar exemptions have occurred in other years, and this fortunate escape from the losses which attend

an outbreak of this affection cannot be regarded as an indication that the disease will not reappear in future. Recent investigations have confirmed the opinion that the infectious organisms of anthrax are sometimes present in the milk of cows affected with this disease, and therefore the use of the milk of animals which have been subjected to protective inoculations may disseminate the affection, for the protection which is afforded by inoculation depends upon the actual causation of a mild attack of anthrax. Until the elevation of the temperature which follows the protective inoculation subsides, the milk should be treated as an in-One hundred and eight cases of glanders were fectious fluid. reported during the year, as follows: Bergen county, 6; Burlington county, 10; Camden county, 1; Essex county, 47; Gloucester county, 3; Hudson county, 28; Middlesex county, 2; Monmouth county, 3; Morris county, 2; Passaic county, 2; and Somerset county, 4.

As in previous years, this infection has been brought into New Jersey from points outside of the borders of the State, and there should be no further delay in providing a sufficient number of inspectors to effectually prevent the importation of glandered animals. Three capable and active men stationed along the Hudson river water front and one to protect the Delaware river boundary would at once put an end to the traffic in glandered horses which is at present conducted without interruption by lawless and unprincipled dealers.

Nuisances.—The power to abate nuisances which has been given by the legislature to boards of health has not been employed with that degree of uniformity in the various sanitary districts which is desirable, but progress in this direction may be confidently expected as a consequence of the influence which will be exerted at the annual conferences provided for in the act of April 19th, 1906. The proposal to attack smoke nuisances under the provisions of the health laws has been disapproved by the legal advisers of the cities of Newark and Atlantic City, and in both of these municipalities ordinances have been adopted by the governing bodies having for their object the lessening of the smoke evil. This example should be followed in other localities where smoke is causing annoyance to residents and damaging property values. The Atlantic City ordinance reads as follows:

Section 1. Be it ordained by the city council of Atlantic City, that it shall be unlawful to permit the emission of dense smoke from any chimney or smoke-stack connected with any stationary engine, steam boiler, furnace, range or fire-place within the limits of Atlantic City, which smoke contains soot or other substance in sufficient quantity to permit the deposit of such soot or other substance on any surface within said limits.

Section 2. Be it further ordained, that any owner, agent, manager, lessee or occupant of any building within the limits of Atlantic City to which is attached any chimney or smokestack connected with any stationary engine, steam boiler, furnace, range or fireplace, who permits or allows to be emitted from such chimney or smokestack dense smoke, which contains soot or other substance in sufficient quantity to permit the deposit of such soot or other substance on any surface within the limits of Atlantic City shall, upon conviction thereof before the recorder or other proper officer having jurisdiction, pay a fine of any amount not less than twenty-five dollars and not more than two hundred dollars, as may be imposed by said officer, and be imprisoned in the city jail for ten days in default of the payment of any such fine, and any repetition of said act on any one day following such conviction or any subsequent conviction shall be deemed a new offense.

Section 3. Be it further ordained, that all ordinances inconsistent herewith be and the same are hereby repealed, and that this ordinance shall take effect immediately.

A nuisance caused by a livery stable located in Asbury Park, near hotels and boarding-houses, was unsuccessfully attacked under the health laws several years ago, but an order permanently restraining the owner from further use of the building as a stable for horses was procured when the owners of neighboring property joined in an application for relief from the noise, stench and flies incident to the keeping of horses near dwellings. A decree was subsequently issued in the case of two other livery stables located in Asbury Park, enjoining them from continuing business.

Noise nuisances, like stench nuisances and smoke nuisances, cannot be successfully dealt with under the provisions of the health laws; for such a nuisance anyone whose property is injured can bring suit at law for damages or procure an injunction from the Court of Chancery. "Persons who are not injured in their property, but are annoyed by the nuisance, can apply to the grand jury for an indictment. This is the simplest and most efficient remedy. It covers not only nuisances injurious to health, but other nuisances. There remains a remedy through the action of the State board of health under the act of 1894. To enforce this remedy it is necessary to establish, to the satisfaction of the Chancellor, not merely that there is a nuisance and noisome smells, but that the nuisance is, to a substantial extent, injurious to the public health.

The witnesses to establish such injury are usually the physicians attending sick people in the vicinity and citizens living nearby who claim to have been made ill by the nuisance."

Ice Cream Factories.—Reports of inspections of buildings and apartments in which ice cream is manufactured show that the business is at present conducted almost altogether without sanitary supervision, and that the degree of cleanliness with which the business is managed depends upon the natural or acquired inclinations of the manufacturer and his employes. In too many instances there is entire disregard of cleanly methods in handling the materials which enter into the composition of the finished product, and the washing of utensils is not a cleansing process. Supervision by local boards of health can alone be depended upon, under the laws now operative, to improve these conditions, and copies of reports relating to premises where ice cream is prepared under filthy conditions, and amid unclean surroundings, have been forwarded to the local boards having jurisdiction in the locality.

Tabulation of Deaths in Summer Resorts.—The following form for the construction of a table to separately show the number of deaths in summer resorts among residents and non-residents has been found satisfactory, and its employment by local registrars of vital statistics in localities where the mortality figures are considerably increased by deaths among transient residents is recommended:

	Resident population.	DEATHS.			Deaths among resi-
YEAR.		Resident.	Non- resident.	Total.	dents per 1,000 resi- dent popula- tion.

NOTE.—See page 212 of Annual Report of New Jersey State Board of Health for 1906.

Slaughter-houses.—The inspections of slaughter-houses which have been made under the direction of the State board of health during the past year have shown that the sale of diseased meat cannot be prevented unless every carcass is examined while the dressing process is being performed. So long as a large number of private slaughter-houses are in daily use, inspection and condemnation of diseased carcasses cannot be completely and effectively conducted, and the establishment of public abattoirs has therefore been urged by sanitary authorities. The reports of the inspections show that the business of slaughtering animals, as conducted in the ordinary country slaughter-house in New Jersey, is attended with objectionable conditions, and that a nuisance is maintained on nearly every such premises. The buildings are usually primitive in construction, without drainage and without a sufficient water The floors are generally made of plank and are leaky: the side walls are rough and, like the floors, are soaked with blood; the vards and pens are filthy, and the offal is disposed of in a manner which creates a nuisance. In great contrast with these establishments is the modern abattoir conducted under municipal control: A fireproof building, six stories high, with cattle pens and slaughtering-rooms on the top floor, the animals being brought up on elevators. A rendering plant on the fifth floor; coolingrooms on the fourth floor; cutting-rooms on the third, and on the second, storerooms for the various meat products. floor is used for shipping and offices. All of the interior surfaces of the building are impervious to water, and all portions of the building are abundantly supplied with water and provided with drainage, and refuse substances are quickly removed. Every step in the process of slaughtering and preparing the meat for sale can, in such an establishment, be watched by competent inspectors, and no diseased carcass can escape inspection. Three or four abattoirs of this sort, located in the larger cities of the State, and operated under municipal control, would insure a supply of wholesome meat in New Jersey, and would also render the use of rural slaughterhouses no longer necessary. Until public abattoirs can be established, it is advisable that legislative authority be given to regulate the slaughtering of animals under the permit system, and that permits be granted only in cases where the location, construction and management of the building is such that the business can be carried on without creating a nuisance.

Following is the text of a legislative bill which was introduced at the session of 1907. This bill failed to become a law:

- 1. Every building which is used as a place for slaughtering animals for sale for human food shall be well lighted and ventilated, and shall be provided with an abundant supply of pure water; every such building shall be equipped with adequate facilities for the disposal of all waste fluids; the floor, and also the interior of the side walls to a height of at least six feet, of every such building, shall be constructed of concrete or other water-proof material, and all soiled surfaces of any such building shall be kept clean by washing and scrubbing; all offal and refuse materials shall be disposed of in a manner which will not create a nuisance, and no decomposing materials shall be allowed to accumulate in or about any such building, nor upon the premises attached thereto.
- 2. No person or persons shall operate or conduct any slaughter-house, abattoir or place where animals are slaughtered for sale for human food unless a license has first been issued by the Board of Health of the State of New Jersey to the owner or owners, manager or operator of said slaughter-house, abattoir or place where animals are slaughtered for sale for human food, authorizing said person or persons to operate and conduct a slaughter-house, abattoir or place where animals are slaughtered for sale for human food, and no person shall conduct or operate, or continue to conduct or operate, any slaughter-house, abattoir or place where animals are slaughtered for sale for human food after the revocation of any such license, and the said board is hereby empowered to cause inspections to be made of every building and premises in or upon which animals are slaughtered for human food, and to grant licenses for the operation of the same when, in the judgment of the board, the business conducted in said buildings or upon said premises is managed in a sanitary manner and in accordance with the requirements of law.
- 3. Every license granted under the provisions of section two of this act shall be issued under such rules and regulations as the said board may establish, but no license shall be granted to conduct or operate a slaughter-house, abattoir or place where animals are slaughtered for sale for human food, unless, in the judgment of the said State board of health, the said building is so located and constructed that the business of slaughtering animals can be there conducted in a cleanly manner and without creating a nuisance.
- 4. Every license issued under the provisions of this act may be revoked by the Board of Health of the State of New Jersey if the requirements of this act, or of the rules and regulations established by the said board under authority herein contained, shall be violated; and every person who shall conduct or operate a slaughter-house, abattoir or place where animals are slaughtered for sale for human food in violation of the provisions of this act, or in violation of the rules and regulations herein provided for, or who shall operate or conduct any such establishment without holding a license as herein specified, or who shall conduct or operate, or shall continue to conduct or operate, a slaughter-house, abattoir or place where animals are slaughtered for sale for human food after revocation by said board of the license to conduct or operate the same, and after notice in writing of said revocation has been served on said person, shall, upon conviction thereof, be subject to a penalty of two hundred dollars.
- 5. All penalties prescribed by the provisions of this act shall be recovered in an action of debt by and in the name of the Board of Health of the State of New Jersey as plaintiff. The pleadings shall conform in all respects to the practice prevailing in the court in which any such action shall be instituted,

but no pleading or process shall be set aside or invalidated by reason of any formal or technical defects therein if the same contain a statement of the nature of the alleged violation and of the section of the act alleged to have been violated.

- 6. When judgment shall be rendered against any defendant other than a body corporate execution shall be issued against his goods and chattels and body without any order of the court first had and obtained. If the officer executing any such writ shall be unable to find sufficient goods and chattels of said defendant in his bailiwick to make the amount of said judgment, he shall take the body of the said defendant and deliver him to the keeper of the common jail of said county, there to be detained until discharged by the court in which said judgment was obtained, or by one of the justices of the Supreme Court when such court or justice shall be satisfied that further confinement will not result in the payment of the judgment and costs. In case judgment shall be rendered against a body corporate execution shall be issued against said body corporate as in other actions of debt. All penalties collected under this act shall be paid into the treasury of the State of New Jersey.
- 7. Whenever any person shall violate any of the provisions of this act it shall be lawful for the State board of health, either before or after the institution of proceedings for the collection of the penalty imposed by this act for such violation, to file a bill in the Court of Chancery in the name of the State at the relation of such board for an injunction to restrain such violation, and for such other or further relief in the premises as the Court of Chancery shall deem proper, but the filing of such bill, nor any of the proceedings thereon, shall not relieve any party to such proceeding from the penalty or penalties prescribed by this act for such violation.

Combined Sanitary Districts.—The act of 1906 provides for the joint employment by two or more sanitary districts of one health officer, and this arrangement offers opportunity to secure the services of a superior official, and diminishes the cost of good service. A highly-qualified man could thus be paid a sufficient sum to enable him to devote his entire time to the work, and he could give personal supervisions to all conditions affecting the public health in several small adjoining municipalities, and also in adjacent townships. This arrangement is now on trial to a limited extent and the outcome will be observed with interest.

Quarantine and Disinfection.—Questions having no relation to the value of disinfection and relating only to the payment of the cost of labor and materials employed have recently arisen, and it is desirable that there shall be a clear understanding of the law bearing upon this subject and that uniformity shall prevail throughout the State in the application of the principles which should govern local boards of health in the enforcement of isolation restrictions and the disinfection of infected apartments.

Under authority contained in paragraph 3 of section 12 of chapter 68 of the laws of 1887, local boards of health are empowered to make and enforce ordinances to prevent the spreading of dangerous communicable diseases, and paragraph 13 of the same section provides that ordinances may be made to cause infected persons to be removed and to cause infected premises to be disinfeeted. In progressive localities the ordinances which have been adopted for the purpose of isolating the sick and for the purification of infected apartments correspond very closely, and an examination of the law will show that no procedure for these purposes is lawful unless it is prescribed by ordinance, rule or regulation, nor unless said rule, regulation or ordinance is closely adhered to. All notices of domestic quarantine should be in writing, and they should be personally served upon one or more of the parties affected by the terms of the notice, or they may be posted upon a prominent part of the quarantined building. Letter-book copies of all such notices should be preserved in the office of the board. Written notices of the termination of the period of quarantine should be sent to the householder or other proper person. In cases where the patient or his guardian makes demand for supplies of food, fuel, medical attendance, nursing, &c., it is advisable to offer removal to hospital or other suitable place, and to reach an agreement that if the infected person elects to remain in his own dwelling, then no payments for attendance and maintenance will be allowed by the city. If, however, it should become necessary for the effectual isolation of the patient to cause his removal from his home, then all expenses connected with the care of the case should be paid from the public treasury. If disinfection of private property is deemed necessary by the board of health it should never be entrusted to persons who are unfamiliar with the effects of the materials which are employed, and all responsibility for its efficiency and for the suitability of the measures adopted in each case should rest upon the board or its authorized The general practice is to cause this work to be done at public expense, and there is reason to believe that payment for services of this character could not be legally enforced against the householder.

Conference of State and Local Boards of Health.—The second annual conference of State and local boards of health was held in

the State House, Trenton, October 25th. About one hundred delegates were present, and the meeting proved to be of great interest. A report of the proceedings is published on subsequent pages of this volume. The act of 1903 providing for the improvement of the local sanitary inspection service, and the act of 1906 making provision for an annual gathering of representatives of the boards of health of the State, promise, more than any previous acts of the legislature, to raise the standard of sanitary administration in municipalities and townships, and to secure a greater degree of uniformity in the measures officially employed to promote the public health.

Milk.—The effort to improve the quality of the milk sold in New Jersey began with the enforcement of the act approved March 25th, 1881, and the inspection which was then performed was directed solely against the reduction of the commercial value of milk by the addition of water and removal of the cream.

The act of 1901 repealed the previous acts relating to food and drugs, abolished the office of dairy commissioner, and placed the supervision of the sale of milk in the hands of the State board of health. Measures to prevent the sale of unclean and contaminated milk were adopted and the inspection of dairies was undertaken. Laboratory analyses of milk for the detection of adulteration by the addition of preservatives, removal of cream and addition of water were actively conducted, and the collection of penalties increased in proportion to the number of samples collected, but especial attention was paid to conditions on dairy premises, to the collection, handling and cooling of the milk, its transportation and distribution to consumers.

The temptation to sell water for milk and to abstract cream is so strong in the case of unprincipled dealers that inspections to prevent commercial frauds in the sale of milk will always be required, but very much more important is the necessity of close supervision over the practices of some of the slovenly persons who handle the milk. The purity of the water-supply of dairies, creameries and places where milk is retailed; the effectual cleansing of utensils and containers; the immediate cooling of the milk to a temperature of fifty degrees Fahrenheit or less, and keeping it at this temperature until it is sold, and the distribution of the milk in a cleanly manner and before it becomes stale, are the

precautions which are entitled to first consideration. Over 1,500 records of inspections of dairy premises have been filed in the office of the board, and in a majority of these cases reinspections, sometimes several reinspections, have been made. Letters to dairymen drawing attention to defects and suggesting improvements, are sent in cases where the reports show that unsanitary conditions exist, and copies of these letters are, in some instances, sent to the local health board of the district in which the dairy is situated, and sometimes also to the local board in the locality where the milk is sold. Circular 116 has been widely distributed among milk producers and dealers. The blank forms for reports of inspections of dairies have undergone several modifications; and the following is in use at present:

#### RECORD OF DAIRY INSPECTION.

1. Tenant, owner (Name of dairyman and P. O. address). 2. (Location of dairy. Township and county.) 3. Number of cows. 4. Number milking. 5. Breed. 6. State of health. 7. In good flesh? 8. Have cows been tuberculin tested? 9. Ever examined? 10. By whom? 11. Date of last examination. 12. Were cows in a cleanly condition at time of inspection? 13. Are cows turned out for sun and air in winter? 14. Cows pastured? 15. Sources of water-supply for watering stock. 16. Sources of water-supply for washing cans, bottles and utensils. 17. Distance of well or spring from stable. 18. From manure pile. 19. Distance from privy vault. 20. Distance from other sources of contamination. 21. Is well apparently liable to contamination? 22. Was sample of water taken for analysis? 23. Marks. 24. Location of well from which sample was taken. 25. Size of stable. 26. Cubic feet per cow. 27. Number and size of windows. 28. How is stable ventilated? 29. Material, construction and drainage of floor. 30. Condition and drainage of stable yard. 31. Location of manure pile. 32. Was stable clean at time of inspection? 33. Are side walls, ceilings and ledges kept free from cobwebs and dust? 34. Construction of ceiling and side walls. 35. When last lime-washed? 36. Quantity of milk produced daily. 37. Are milkers' hands washed before milking? 38. Are clean garments put on? 39. Udders of cows cleaned? 40. How? 41. Location of milkhouse. 42. Construction of milkhouse floor. 43. How is milkhouse lighted and ventilated? 44. Is milkhouse kept clean? 45. Is milk cooled? 46. How? 47. How long after milking? 48. To what temperature? 49. Is milk bottled? 50. How long after cooling? 51. Where is milk bottled? 52. Where is milk stored? 53. How long is milk stored before being shipped? 54. Source of icesupply. 55. How and where are utensils washed and dried? 56. Utensils clean? 57. Any appliances for sterilizing cans, bottles, pails and dippers? 58. If shipped, to whom, and where? 59. Where is milk retailed? 60. Quarts retailed from cans. 61. Quarts sold in bottles. 62. Ever run short? 63. If so, where is supply obtained? 64. How many persons handle the milk? 65. All in good health? 66. Date of last sickness among persons on dairy premises. 67. Diseases.

## SCORING RECORD.

Cows.	Perfect.	Milkhouse—(Con.)	Perfect.			
Condition (2)  Health (8)  Cleanliness  Water-supply	$$ $\stackrel{10}{5}$	Cleanliness	5 5-20			
Stables.		Milkers and Milking.				
Construction	5 5	Health of attendants Cleanliness of milking	5 10–15			
Cubic space per cow (3)  Removal of manure (2)  Stable yard (1)		Handling of Milk.  Prompt and efficient cooling  (Temperature of milk:—°F.),	1			
Milkhouse.		Storing at a low temperature, Protection during transporta-				
Location (1)	\ 5	Total score	5-20 100			
Signature of Inspector						
Cows—Condition and healthfulness.—Deduct 2 points if in poor flesh and 8 points if not apparently free from disease						
STABLES—Construction.—For cement floor in good condition allow 2 points; fair, 1; poor, 0; wood floor or other material in good condition, 1; fair, ½; poor, 0; good tie, ½						

Stable yard.—In good condition, ½; well drained, ½; otherwise, 0......

3

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MILKHOUSE—Construction.—Tight, sound floor, and not connected with any other building, well lighted, well ventilated, 2; if connected with another building under good conditions, 1; otherwise, 0; if no milk-	
house, 0	2
Equipment.—Hot water for cleaning utensils, 1; cooler, 1; proper pails	
and strainers used for no other purposes, 1	:
Cleanliness.—Interior clean, 5; good condition, 4; medium, 3; fair, 2;	
poor, 1; bad, 0	Ę
Care and cleanliness of utensils.—Clean, 3; kept in milkhouse or suitable	
outside rack, 2; otherwise, 0	5
Water-supply.—If pure and clean running water, 5; pure and clean still water, 3; otherwise, 0	Ş
MILKING—Attendants.—Healthy, 5; otherwise, 0	5
Cleanliness and milking.—Clean milking suits, milking with clean dry hands, and attention to cleanliness of udder and teats while milking, 10; no special suits, but otherwise clean, 7; deduct 3 points for uncleanly teats and udder and 4 points for uncleanly hands	10
HANDLING THE MILK—Prompt and efficient cooling.—If prompt, 5; if 50° F. or under, 5; over 50° and not over 55°, 4; over 55° and not	
over 60°, 3; over 60°, 0; if neither prompt nor efficient, 0	10
Storing at low temperature.—If 50° F. or under, 5; over 50° and not over	
55°, 4; over 55° and not over 60°, 3; over 60°, 0	5
Protection during transportation to market.—If thoroughly protected	
(iced), 5; good protection, 4; partly protected, 2; otherwise, 0	5
Const. If total const. to CO on the send and district Of const. and confirm	

Score.—If total score is 90 or above and each division 85 per cent. perfect or over, the dairy is *Excellent*.

If total score is 80 or above and each division 75 per cent. perfect or over, the dairy is Good.

If total score is 70 or above and each division 65 per cent. perfect or over, the dairy is Fair.

If total score is below 70 and any division is below 65 per cent. perfect, the dairy is *Poor*.

Commercial pasteurization of milk for the purpose of prolonging the period during which it will remain salable has recently been widely adopted in New Jersey, and its disadvantages have already appeared. The demand on the part of creamerymen and milk dealers for cleanly conditions on dairy premises is less urgent than formerly, for the keeping qualities of the milk can now be increased by passing the milk through the heating apparatus, and therefore one of the strongest aids in the effort to obtain improvements on dairy premises has been in part withdrawn. "By heating the milk the beneficient bacteria are destroyed, while noxious bacteria may be preserved to proliferate later, and, moreover, chemical changes of an undesirable character are produced in milk

by heat. Commercially pasteurized milk should be prohibited by law or ordinance unless the process is under official control."

Experience has shown that the provisions of chapter 126 of the laws of 1903, which are intended to prevent the use of polluted water on dairy premises for washing milk cans, bottles and untensils, is not well adapted to the purpose for which it is designed. This act fixes a penalty for the use of the polluted water, but the evidence necessary to secure a conviction requires testimony to show that the water used is actually taken from the polluted source, and such evidence can rarely be obtained by ordinary meth-In cases where the dairyman denies that he is taking water from the polluted well the inspector is compelled to resort to detective practices and to suddenly appear, with his witness, when the water is being used in violation of the law. He must not only see it used, but he must see it collected from the polluted well. To get evidence of this character is not only extremely difficult, but usually impossible, and in the efforts to obtain it much valuable time is necessarily expended. It is therefore desirable that a change be made in the law which will provide that polluted wells on dairy premises, where milk is produced for sale, shall be filled with clean earth and abandoned as sources of watersupply, and to require that all other sources of polluted water supplied on dairy premises or in shops or depots where milk is sold shall be cut off. Very great improvement in the degree of cleanliness with which the business of collecting and distributing milk is conducted has resulted from the inspection of dairies and the communications which have been sent to dairymen, and it will unquestionably be advisable to continue this work. Thus far these inspections have been made from time to time, as opportunity has permitted, by the assistant inspectors of food, but the value of the service which has been rendered has shown that the public interests will be promoted by providing additional inspectors who will devote their entire time to this duty.

At a meeting of the State board of health, held May 21st, 1907, the following resolutions were adopted:

<sup>&</sup>lt;sup>1</sup> Journal A. M. A., September 21st, 1907.

"Whereas, The inspection of dairies in New Jersey for the purpose of preventing the sale of milk from diseased animals, and to secure improvement of defects which may be observed in the water-supply, the construction, ventilation, lighting and drainage of cow stables and milkhouses, and for the establishment of a high standard of cleanliness in the collection and handling of milk, has been continuously performed under the direction of this board during the past twelve years, and records of these inspections are now on file in this office.

"Whereas, The reports of these inspections have been followed by letters of advice to the owner or tenant where conditions on dairy premises have been found defective, and as a result of these measures improvements have been made in many localities in the conditions under which milk is produced and distributed.

"WHEREAS, The commissioner of health of the city of New York has stationed one of his agents in Sussex county, New Jersey, and said agent has, for several months, been engaged in the inspection of the dairies from which milk is shipped to New York City, many of these inspections being duplications of work already performed by the inspectors of this board.

"Whereas, It has been found that the methods employed in the inspection of dairies in New Jersey, under the system adopted by the commissioner of health of New York City, is strongly at variance with that which is authorized by the laws of this State, and consequently there has arisen much dissatisfaction among dairymen because of arbitrary requirements from the New York agent, often in opposition to the suggestions which are sent out under the direction of this board.

"Whereas, On two occasions a personal interview has been had by a representative of this board with the health commissioner of New York City, and he has been informed that if a list of the dairies in New Jersey from which milk is shipped to New York is provided reports of conditions on said dairy premises will be immediately and also periodically supplied for the information of the sanitary authorities of said city, and in a letter addressed to said authorities, dated February 5th, 1907, the following appears: 'If you will send to us a list of the dairies in New Jersey, concerning which your department desires information, we will be glad to cause inspections to be made in all cases where recent records are not now on file in this office and furnish the desired information furnished by us shall be verified by an officer or agent from your city we shall be glad to cause one of our inspectors to meet your representative in order that they may go over the work together. Upon receipt of the list above referred to we will at once begin the collection of the information which you desire.'

"Resolved, That this board hereby again states its intention to continue to cause inspections and reinspections to be made of all dairy premises in New Jersey from which milk is shipped to the city of New York, and to furnish upon request records of these inspections for the information of the health authorities of said city.

"Resolved, That we hereby again request that hereafter all dairy inspections in New Jersey which are conducted by any agent of the health commissioner of the city of New York shall be performed only when accompanied by an officer or inspector of this board."

Very respectfully,

HENRY MITCHELL, Secretary.

# List of Sanitary Districts.

## With Names and Addresses of Officers and Members.

#### CITIES.

Asbury Park, Monmouth County; population, 4,526. Members and Officers—Theodore H. Beringer, President; David W. Sexton, George F. Wilbur, M.D., Asher S. Burton, Harry C. Millar, Joseph H. Bryan, M.D., William C. Weeden, Samuel A. Patterson, Attorney; B. H. Obert, Secretary, Registrar and Health Officer; Thomas J. Duffield, Inspector; Harry R. Ingalls, Inspector; Miss Sadie H. Layton, Clerk.

\*Atlantic City, Atlantic County; population, 37,593. Members and Officers—M. LeRoy Somer, M.D., Secretary.

Bayonne, Hudson County; population, 42,262. Members and Officers—Pierre P. Garven, President; Garret L. Post, Edward S. Benson, George T. Greenley, James Knight, J. H. Mahuken, John Gottko, James D. Boyd, Secretary; John T. Connolly, Health Inspector; H. S. Winterhalter, Sanitary Inspector; Frederick Wilson, Inspector.

\*Belvidere, Warren County; population, 1,869. Members and Officers —F. P. Lefferts, M.D., Secretary.

Beverly, Burlington County; population, 2,258. Members and Officers—R. P. Haines, President; B. F. Soby, M.D., Berten Kiple, George Smith, Charles Parsons, Jr., W. S. Fenimore, Clerk and Registrar; George T. Tracy, M.D., Inspector.

Bordentown, Burlington County; population, 4,073. Members and Officers—Samuel E. Burr, President; Samuel R. Magee, David R. Brown, Edwin L. Thompson, Wm. H. Shipps, M.D., Wm. M. Kester, Clerk; Harry W. Kunzi. Registrar; Amos P. Thorn, Inspector.

\*Bridgeton, Cumberland County; population, 13,624. Members and Officers—Jacob B. Jones, Secretary.

Burlington, Burlington County; population, 8,038. Members and Officers—J. B. Cassady, M.D., President; Franklin S. Carter, Wm. C. Farner, Neal D. Keeler, Wm. R. Schuyler, Thomas S. Mooney, Clerk and Registrar; M. W. Newcomb, M.D., Inspector.

Camden, Camden county; population, 82,912. Members and Officers—M. K. Mines, M.D., President; M. F. Middleton, M.D., E. W. Collins, H. H. Davis, M.D., R. H. Gaskill, Wm. I. Kelchmer, M.D., S. G. Bushey, M.D., Eugene B. Roberts, Clerk; I. V. Bradley, Registrar; John F. Leavitt, M.D., Inspector; Henry B. Francis, Inspector; Jos. A. Starr, Inspector; A. T. Sellers, Inspector; G. H. Robinson, Inspector.

Cape May, Cape May County; population, 3,006. Members and Officers—A. L. Leach, M.D., President; George Lovett, Robert S. Hand, Samuel F. Eldredge, Wm. Porter, Clerk; V. M. D. Marcy, M.D., Inspector.

Dover, Morris County; population, 6,353. Members and Officers— Eustice F. Rudine, President; S. B. Johnson, M.D., Edward Jenkins, A.

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<sup>\*</sup> No report received.

W. Condict, M.D., J. H. C. Hunter, Clerk and Registrar; John G. Taylor, Inspector.

East Orange, Essex County; population, 25,175. Members and Officers—Roger H. Butterworth, President; Frank B. Lane, M.D., Charles M. Matthews, H. L. De Nourie, Harvey Mott, F. W. Lockwood, M.D., Clerk; Lincoln E. Rowley, Registrar; Edward W. Lindsley, Inspector; Wm. T. Bowman, Health Officer.

Egg Harbor, Atlantic County; population, 2,280. Members and Officers—August A. Breder, President; Henry G. Regensburg, Henry Otts, Valentine P. Hofmann, Clerk and Registrar; J. U. Elmer, M.D., Inspector.

Elizabeth, Union County; population, 60,509. Members and Officers—John W. Whelan, President; L. R. Brown, M.D., J. L. Bauer, J. S. Green, M.D., H. R. Livengood, M.D., S. T. Quinn, M.D., A. Stern, M.D., John F. Kenah, Clerk and Registrar; L. J. Richards, Inspector; P. J. Connell, Inspector; Henry Toole, Inspector.

Englewood, Bergen County; population, 7,922. Members and Officers—William C. Tucker, President; Charles A. Bogert, F. C. Bradner, M.D., R. A. Sheppard, M.D., Gilliam D. Bogert, Clerk and Registrar; Irving Middleton, Inspector.

Gloucester City, Gloucester County; population, 8,055. Members and Officers—George W. Turner, President; J. Alonzo Beek, M.D., John Kandle, Harlan S. Miner, Charles E. Rang, Harry Reeves, Carlos B. Allen, Clerk; George C. Wynkoop, Registrar; Duncan W. Blake, M.D., Inspector.

Hackensack, Bergen County; population, 11,098. Members and Officers—Lemuel Lozier, President; Peter Xylander, E. B. Walden, F. W. Smith, Charles F. Stephens, John Klauer, J. G. Ackerson, Secretary; F. S. Hallett, M.D., Health Officer; Robert Ballagh, Inspector; A. C. Hart, Counsel.

Hoboken, Hudson County; population, 65,468. Members and Officers— E. T. Steadman, President; D. Van Weak, Israel Weiman, D. B. Pindar, Joseph Tucker, Clerk and Registrar; Antonio Granelli, Health Inspector; John Marnell, Plumbing Inspector.

Jersey City, Hudson County; population, 232,699. Members and Officers—F. E. Lambert, M.D., President; J. H. Finnerty, M.D., Norman L. Rowe, M.D., Wm. Delaney, Joseph A. Sprouls, Henry Hilton, Seth A. Chester, J. Morgan Jones, M.D., Henry Smellie, Clerk; Thomas H. Giblin, Registrar.

Lambertville, Hunterdon County; population, 5,016. Members and Officers—George L. Romine, M.D., President; A. D. Anderson, William R. Bowne, Edward W. Closson, M.D., John Cooney, Harry K. Kramer, James H. Reynolds, Clerk and Registrar; John L. Coryell, Inspector.

Long Branch, Monmouth County; population, 12,183. Members and Officers—John W. Bennett, M.D., President; L. Rothenberg, B. D. Woolley, John L. Price, Wm. T. Burke, Jos. T. Welch, M.D., Edward B. Blaisdell, Clerk and Registrar; James Milmore, Inspector; M. C. Burns, Plumbing Inspector.

\*Millville, Cumberland County; population, 11,884. Members and Officers—L. H. Hogate, Secretary.

Montclair, Essex County; population, 16,370. Members and Officers—M. N. Baker, President; Richard P. Francis, M.D., Levi W. Halsey, M.D., Herbert M. Lloyd, J. N. Holton, Secretary; Chester H. Wells, Health

<sup>\*</sup> No report received.

Officer and Registrar; J. G. Foose and J. L. Ebbels, Sanitary Inspectors; David H. Baldwin, Chemist; Edwin B. Goodell, Attorney.

Morristown, Morris County; population, 12,146. Members and Officers—John Rosevear, President; Isaac R. Pierson, John R. Burr, O. N. Hughson, James Douglas, M.D., David H. Wilday, Clerk and Registrar; Robert S. Van Dyke, Inspector; John Belbey, Inspector; E. A. Quayle, Counsel.

Newark, Essex County; population, 283,289. Members and Officers—H. C. H. Herold, M.D., President; W. S. Disbrow, M.D., J. T. Wrightson, M.D., L. L. Davenport, J. W. Dobbins, L. E. Hollister, M.D., J. R. Rutan, G. R. Kent, M.D., I. Rolfe Denman, J. B. Wood, Jas. F. Connelly, Registrar; David D. Chandler, Health Officer.

New Brunswick, Middlesex County; population, 23,133. Members and Officers—Fred. B. Kilmer, President; Geo. B. Rule, A. L. Smith, M.D., Prof. F. C. Van Dyck, Irving Cronk, M.D., Benjamin Guttman, M.D., Secretary and Inspector; James Morrison, Registrar.

Orange, Essex County; population, 26,101. Members and Officers—G. H. Richards, M.D., President; Thomas C. Colt, D. W. Poor, M.D., L. B. Clark, James Kane, John T. Davis, O. S. Williams, Eugene H. Sullivan, Secretary; Willet B. Gano, Registrar; Richard Savage, Inspector; Thomas F. Harris, Plumbing Inspector.

Passaic City, Passaic County; population, 37,837. Members and Officers—Ernest Remig, President; John J. Slater, James A. Hanlon, Anton L. Petterson, Bernard G. Volger, Rob't R. Armstrong, Wm. B. Davidson, Clerk and Plumbing Inspector; Geo. F. Grear, Registrar; Hiram Williams, M.D., Health Officer; J. Payne Low, Veterinary Inspector.

Paterson, Passaic County; population, 111,529. Members and Officers—John R. Hurley, President; James F. Briody, M.D., Andrew F. McBride, M.D., Wm. McKeon, Franklin Van Winkle, James P. McNair, Clerk; Chas. S. Gall, Registrar; J. Alex. Brown, M.D., Health Inspector; Wm. S. Green, M.D., Wm. H. Lowe and James Fitzpatrick, Sanitary Inspectors; Wm. H. MacDonald, Plumbing Inspector.

\*Perth Amboy, Middlesex County; population, 25,895. Members and Officers—Charles M. MacWilliam, Secretary.

Phillipsburg, Warren County; population, 13,325. Members and Officers—Joseph Pfeiffer, President; A. Williston, M.D., P. F. Haggerty, M. T. Lynch, Frank Coyne, Daniel Zeigler, Frank Kneedler, Clerk and Registrar; Howard R. Carey, Inspector; B. C. Frost, Attorney.

Plainfield, Union County; population, 18,468. Members and Officers—B. V. Hedges, M.D., President; F. W. Dunn, Chas. H. Dunham, William C. Kinney, T. S. Davis, M.D., Secretary; Miss H. O. Mattison, Registrar; L. R. Thurlow, Health Officer; William Addis, Sr., and James O'Brien, Jr., Inspectors.

Rahway, Union County; population, 8,649. Members and Officers—Elihu B. Silvers, M.D., President; George R. Van Sant, Walter E. Cladek, M.D., Jos. G. Smith, David Armstrong, Wm. H. Randolph, Jr., G. Otto Graves, Chas. H. Lambert, Clerk and Registrar; Fred. J. Mix, Sanitary Inspector, Fred. W. Sell, M.D., Health Officer.

Salem, Salem County; population, 6,443. Members and Officers—Warren T. Sparks, President; Charles E. Markley, Henry Chavanne, M.D., L. H. Hummel, M.D., Clinton Bowen, Clerk and Registrar; Austin T. Walton, Inspector.

Summit, Union County; population, 6,845. Members and Officers—Wm. H. Lawrence, M.D., President; James G. Ovens, Franklin D. Peale,

<sup>\*</sup> No report received.

Henry B. Twombly, Allan B. Wallace, Dr. J. E. Rowe, Health Officer, Secretary and Registrar; N. M. Bullard and J. J. McGrath, Inspectors.

\*Trenton, Mercer County; population, 84,147. Members and Officers—Thos. Holmes, Secretary.

Woodbury, Gicucester County; population, 4,560. Members and Officers—Wm. T. Cooper, President; S. B. Burkett, H. B. Diverty, M.D., Wm. Duffield, A. W. Cattell, Wm. A. Fisher, Arthur Starr, Secretary; Joshua Dawson, Health Inspector; T. D. Clark, Plumbing Inspector.

#### BOROUGHS.

Allendale, Bergen County; population, 762. Members and Officers—Wallace E. Carver, President; W. W. Pollock, W. C. Ilsley.

\*Allenhurst, Monmouth County; population, 247. Members and Officers—Wm. H. Conover, Secretary.

Allentown, Monmouth County; population, 653. Members and Officers—Dr. Emly, President; Dr. Johnson, C. A. Spaulding, J. S. Robbins, Clerk; W. R. Forsythe, Registrar and Inspector.

Alpine, Bergen County; population, 448. Members and Officers—W. S. Opdyke, President, Alpine; Douglas Green, Closter; J. H. Conklin, Alpine; L. H. Tavernier, Clerk and Registrar, Alpine.

Andover, Sussex County; population, 427. Members and Officers— J. C. Clark, M.D., President; 'I'homas A. Decker, Samuel S. Wills, W. E. Willson, Cierk; Samuel H. Willson, Registrar.

\*Anglesea, Cape May County; population, 400. Members and Officers—Geo. W. Dougherty, Secretary.

Atlantic Highlands, Monmouth County; population, 1,480. Members and Officers—H. A. Hendrickson, M.D., President; A. G. Hall, J. G. Brooks, L. D. Morrison, T. J. Emery, L. B. Morris, Thomas H. Leonard, Clerk, Registrar and Inspector.

Audubon, Camden County; population, 525. Members and Officers—Frederick Wiechard, President; James Carmen, James Yardley, Wm. Osborn, Howard Callingham, Clerk and Registrar; James Mackintosh, Inspector.

Avalon, Cape May County; population, 86. Members and Officers—John E. Peters, President; Elbert B. High, Fred. P. Canfield, Chas. B. Kates, Clerk and Registrar; Hugh H. Holmes, Inspector.

Avon, Monmouth County; population, 328. Members and Officers—Walter Harris, President; James Brighton, Monroe Newman, Frank Sofield, H. M. Dolan, Clerk and Registrar.

\*Barnegat City, Ocean County; population, 78. Members and Officers—Alfred W. Brown, Borough Clerk.

\*Bay Head, Ocean County; population, 278. Members and Officers—Julius Foster, Assessor.

Beach Haven, Ocean County; population, 301. Members and Officers—John T. Fox, President; Thos. E. Gifford, Thomas Cale, W. F. Beer, Clerk; Thomas A. Gavin, Registrar and Inspector.

Belmar, Monmouth Gounty, population, 1,089. Members and Officers—Harry E. Snow, M.D., President; Wm. M. Bergen, Cyrus B. Honce, Frank P. Philbrick, Fred. M. Davison, Charles C. Wood, George G. Titus, Charles O. Hudnut, Clerk and Registrar; Wm. A. Robinson, Inspector.

<sup>\*</sup> No report received.

Bergen Fields, Bergen County; population, 1,095. Members and Officers—Malcolm L. Birnie, President; William B. May, W. B. Van Saun, M. J. Pratt, John J. Huyler, Registrar and Secretary.

Bogota, Bergen County; population, 522. Members and Officers—John McNaughton, President; Henry Wehrnmaker, R. B. Lord, Peter Bogart, Jr., John F. Hill, Clerk; H. P. Ross, Registrar; M. G. Theurit, Inspector.

Bound Brook, Somerset County; population, 3,389. Members and Officers—R. H. Brokaw, President; C. R. P. Fisher, M.D., George Stryker, W. S. Negus, Clerk; Chas. McNabb, Registrar.

Bradley Beach, Monmouth County; population, 1,037. Members and Officers—A. W. Allen, President; W. Hallmeyer, A. I. Jones, C. F. Burney, Clerk and Registrar; Geo. W. Bostick, Inspector.

\*Branchville, Sussex County; population, 591. Members and Officers—E. S. Dalrymple, M.D., Secretary.

\*Brigantine, Atlantic County; population, 95. Members and Officers—J. A. Price, Registrar.

Butler, Morris County; population, 2,188. Members and Officers—Geo. C. Coates, M.D., President and Inspector, Butler; Edmond P. Smithyman, Butler; Rudolph Gunter, Butler; Allen Looker, Registrar, Bloomingdale; Dr. Samuel K. Owen, Secretary, Butler.

\*Caldwell, Essex County; population, 1,670. Members and Officers—Isaac E. Baldwin, Secretary.

\*Cape May Point, Cape May County. Members and Officers—Lafayette Miller, Registrar.

Carlstadt, Bergen County; population, 3,100. Members and Officers—Frank Hoffmann, President; Ernst F. Sickenberger, Charles Lonz, Herman Foth, Secretary and Registrar; Charles Schmidt, Inspector.

Chatham, Morris County; population, 1,554. Members and Officers—Jos. H. Conklin, President; Walter V. Sayre, Joseph E. Pollard, M.D., J. Thomas Scott, D. H. Crawford, Clerk and Registrar; John J. McCormack, Inspector.

Chesilhurst, Camden County; population, 258. Members and Officers—James Brearey, President; Harry Horton, Clarence Glatterer, Louis Salmon, Alfonzo Curado, Jacob T. Humphries, Clerk and Registrar.

Clayton, Gloucester County; population, 1,864. Members and Officers—A. G. Silver, President; D. W. Moore, Jr., N. D. Brown, J. W. Dooling, C. F. Fisler, Secretary, Registrar and Inspector.

Cliffside Park, Bergen County; population, 2,128. Members and Officers—Charles S. Brady, M.D., President, Grantwood; Albert E. Wicks, Hudson Heights; Daniel P. Woods, Grantwood; Leonard P. Winkler, Cliffside; Robert H. Nutt, Clerk, Cliffside; J. H. Raas, Registrar, Grantwood.

Clinton, Hunterdon County; population, 830. Members and Officers—A. S. Leatherman, President; Wm. Knight, M.D., Geo. A. Hart, Clerk and Registrar; James Mulligan, Inspector; Wm. Carpenter, Inspector.

\*Closter, Bergen County; population, 1,272. Members and Officers—Alfred Anderson, Registrar.

Collingswood, Camden County; population, 2,588. Members and Officers—Charles Fletcher, President, Collingswood; Wm. H. Hambrecht, Collingswood; Benj. F. Gardiner, Collingswood; Walter Patterson, Collingswood; Thomas Peacock, M.D., West Collingswood; H. B. Earnest,

<sup>\*</sup> No report received.

Clerk, Registrar and Inspector, Collingswood; E. S. Sheldon, M.D., Inspector, Collingswood; C. R. Shinn, Plumbing Inspector, Collingswood; George Noakes, Inspector, Collingswood.

Cresskill, Bergen County; population, 505. Members and Officers-C. A. Lewis, President, Cresskill; J. W. Flecke, Cresskill; P. O. E. Ruhl, Cresskill; J. Diehl, Cresskill; H. V. Westervelt, Clerk, Cresskill; Geo. Y. Allaire, Registrar, Cresskill; J. B. W. Lansing, M.D., Inspector, Tenafly; C. Westervelt, Inspector, Cresskill.

Deal, Monmouth County; population, 164. Members and Officers-Chas. Fritz, President; Frederick Gerken, J. E. Dillon, Isaac C. Kiggins, Henry D. Harris, Frederick C. Weber, Clerk.

\*Delford, Bergen County; population, 841. Members and Officers-

Geo. F. Moore, Secretary, Oradell.

Demarest, Bergen County; population, 480. Members and Officers-M. J. Bogert, President; C. E. Hutchinson, Geo. V. Morton, J. Lutz, Wm. Begg, Clerk and Registrar.

Dumont, Bergen County; population, 913. Members and Officers-R. D. Van Buskirk, President; V. B. Demarest, P. E. Moore, E. Stanley Clarke, Secretary and Registrar; J. E. Pratt, M.D., Inspector.

\*Dunellen, Middlesex County; population, 1,517. Members and Officers -W. S. Frederick, Clerk.

\*East Newark, Hudson County: population, 2,828. Members and Officers-

East Rutherford, Bergen County; population, 3,165. Members and Officers-P. B. S. Hodges, President; W. E. Ogden, M.D., N. Kip, George Sanders, Wm. Seeger, C. R. Wheatley, Clerk and Registrar; H. J. Harms, Inspector.

\*Edgewater, Bergen County; population, 1,392. Members and Officers -George A. Carleton, Secretary and Registrar.

Elmer, Salem County; population, 1,219. Members and Officers—C. W. Hann, President; J. B. Conover, M.D., M. F. Riley, J. M. Garrison, I. B. Reeves, D. P. Dare, Clerk; Hiram Van Meter, Registrar.

\*Englewood Cliffs, Bergen County: population, 266. Members and Officers-John G. Ropes, Registrar, Fort Lee.

\*Englishtown, Monmouth County; population, 416. Members and Officers-E. T. Reid, Registrar.

Essex Fells, Essex County; population, 393. Members and Officers-W. M. d'Espard, President; C. E. Leach, W. F. Oakes, J. C. Sprigg, F. Byrne Ivy, Clerk and Registrar; B. C. Kent, Inspector.

Etna, Bergen County; population, 681. Members and Officers-Jay W. Watkins, President; Frederick A. Maul, Harry I. Angell, Clerk and Registrar.

Fairview, Bergen County; population, 1,693. Members and Officers-Charles Sedore, President; Wm. Wingerath, John S. Tracy, C. M. Driggs, Clerk; John Bush, Registrar.

\*Fanwood, Union County; population, 445. Members and Officers-Burton P. Hall, Secretary.

Farmingdale, Monmouth County; population, 399. Members and Officers-Wm. R. Kinmouth, M.D., President; Henry Matz, G. C. Megill, Frank P. Van Note, Clerk and Registrar.

Fieldsboro, Burlington County; population, 451. Members and Officers— Samuel Church, President; Wm. H. Errickson, Walter Griffiths, William

<sup>\*</sup> No report received.

Leatherbury, Clerk; George W. Carman, Registrar; Robert Bignall, Inspector.

\*Fiorham Park, Morris County; population, 803. Members and Officers —W. A. Hehn, Clerk, Chatham.

Folsom, Atlantic County; population, —. Members and Officers—George W. Cowden, President; John C. Eby, Clerk.

Fort Lee, Bergen County; population, 3,433. Members and Officers— Jas. F. Shehan, President, Fort Lee; Peter Cella, Fort Lee; Edward Cavanah, Fort Lee; Gerome Sardi, Fort Lee; Ferdinand Knorzer, Fort Lee; R. H. Morrow, Clerk and Registrar, Coytesville; Max Wyler, Inspector, Fort Lee.

Frenchtown, Hunterdon County; population, 975. Members and Officers—Chas. B. Salter, President; W. S. Dairymple, Martin F. Bellis, Isaac W. Quick, Edwin W. Moore, Clerk.

\*Garfield, Bergen County; population, 5,092. Members and Officers—P. J. Scaplan, Registrar.

\*Garwood, Union County; population, 564. Members and Officers—Chas. D. Costleigh, Clerk.

\*Glen Ridge, Essex County; population, 2,062. Members and Officers—H. K. Benson, Secretary.

\*Glen Rock, Bergen County; population, 778. Members and Officers—Peter Van Winkle, Secretary and Registrar, Ridgewood.

Haddonfield, Camden County; population, 3,466. Members and Officers—Wm. J. Boning, President; Charles Hillman, Stanley Rusk, Walter H. Smith, M.D., Wm. H. Harrison, Clerk and Registrar; Edward F. Magill, Inspector.

Haddon Heights, Camden County; population, 654. Members and Officers—George W. Waters, M.D., President and Inspector; Edward Jenks, M. C. Anderson, W. M. Pollock, Secretary; Wm. Key, Registrar.

Harrington Park, Bergen County; population, 283. Members and Officers—C. Friend, President; J. F. Gleason, A. E. Taylor, Cornelius G. Eckerson, Clerk.

Hasbrouck Heights, Bergen County; population, 1,650. Members and Officers—G. J. Elwood, President; H. B. Vannote, John G. Martin, W. F. De Voy, Clerk and Registrar; S. V. Morris, M.D., Inspector.

Haworth, Bergen County; population, 400. Members and Officers—Henry E. Crocker, President; E. H. Schuyler, M. Dieck, A. Martmot, W. T. McCulloch, Henry F. Copeland, Clerk and Registrar.

Hawthorne, Passaic County; population, 2,570. Members and Officers—Paul Wieland, President, Hawthorne; F. D. Garrison, Hawthorne; C. D. Petry, Hawthorne; Bruce Beveradge, North Paterson; J. G. Whittaker, Clerk, Hawthorne; W. E. Thompson, Registrar, Hawthorne; A. B. Vanderbeek, M.D., Inspector, Paterson.

Helmetta, Middlesex County; population, 575. Members and Officers—Arthur H. Clemons, President, Helmetta; Clarence M. Thorn, Helmetta; John A. Johnson, Helmetta; Andrew A. York, Helmetta; Rob't J. Franklin, Clerk, Helmetta; Edward M. Clemons, Registrar, Helmetta; Jos. Denelsbeck, M.D., Inspector, Spotswood.

High Bridge, Hunterdon County; population, 1,382. Members and Officers—P. H. Murray, President and Registrar; M. F. Apgar, Samuel Tait, John L. Phillips, Clerk; W. C. Alpaugh, M.D., Inspector.

<sup>\*</sup> No report received.

Highland Park, Middlesex County; population, 714. Members and Officers—Wm. E. Burns, President; Joseph T. Dunham, John Beekman, A. W. F. Mueller, Peter F. Senker, Charles Nourse, Clerk.

Highlands, Monmouth County; population, 1,275. Members and Officers—Henry Fraizor, President; Dr. Oppferman, Granden Johnson, Fletcher Hagerman, S. Liming, Clerk and Registrar; Alex. Weaver, Inspector

\*Hightstown, Mercer County; population, 2,093. Members and Officers '—Frank V. Jemison, Registrar.

Holly Beach, Cape May County; population, 1,327. Members and Officers—Carl A. Haswin, President; William A. Shaw, Treasurer; Forrest B. Long, Clerk and Registrar; Eben Yenney, Sanitary Inspector; M. T. Lummis, M.D., Inspector.

Hopatcong, Sussex County; population, 125. Members and Officers—Lewis S. Pilcher, M.D., President, Landing; John Aldred, Landing; T. B. Atterbury, Landing; Dwight B. Smith, Landing; Theo. A. K. Gessler, Clerk and Registrar, Landing; Sherborne V. Dameral, Inspector, Landing.

Hopewell, Mercer County; population, 984. Members and Officers—R. P. Miller, M.D., President; John H. Merz, Hugh A. Smith, William H. Hart, Dr. Robert Zulauf, Clerk and Registrar.

\*Island Heights, Ocean County; population, —.... Members and Officers—

\*Junction, Hunterdon County; population, 974. Members and Officers—E. E. Ridde, Clerk.

Kenilworth, Union County; population, —... Members and Officers—Christopher C. Wilbur, President; James Russel, Joseph Gow, Percival McMurtry, Ernest Dellar, Charles Kneedson, Clerk.

\*Lavalette, Ocean County; population, 22. Members and Officers—A. G. Fischer, Registrar.

Leonia, Bergen County; population, 1,041. Members and Officers—Henry R. Goesser, President; John Boyd, H. M. Thompson, Clerk and Registrar; J. T. Wyckoff, M.D., C. W. Mooney and A. D. Bogert, Inspectors.

\*Linden, Union County; population, 403. Members and Officers—Joseph B. McDonaugh, Clerk.

\*Linwood, Atlantic County; population, 503. Members and Officers—James Farish, Secretary and Registrar.

Little Ferry, Bergen County; population, 1,772. Members and Officers—Joseph Kavrick, President; Frank Novak, John Kavrick, Louis Brauer, Clerk and Registrar; John A. Dair, Inspector.

Lodi, Bergen County; population, 2,793. Members and Officers—Anthony De Ward, President; Walter H. Amerman, John Verhoeve, Jacob Van Hook, Clerk and Registrar; Henry H. Brevoort, M.D., Inspector.

Longport, Atlantic County; population, 133. Members and Officers—Thomas D. Sullivan, President; J. Percy Remington, Bolton E. Steelman, Wilton D. Jackson, E. Fullerton Cook, Secretary and Registrar.

Madison, Morris County; population, 4,115. Members and Officers—I. N. Van De Water, M.D., President; F. Seward, M.D., A. G. Evans, Samuel Brant, C. E. Cook, Clerk and Registrar; S. Fred. Burnett, Inspector.

Manasquan, Monmouth County; population, 1,636. Members and Offi-

<sup>\*</sup> No report received.

cers—A. Howell Miller, President; RaIph D. Bush, Alonzo Mount, M. R. Mulford, Robert M. Marks, Secretary, Registrar and Inspector.

Matawan, Monmouth County; population, 1,479. Members and Officers—Wm. Hardwick, President; I. T. Rue, John F. Lisk, A. J. Jackson, M.D., Wm. Redgers, Clerk and Registrar; J. Wm. Maggs, Inspector.

Maywood, Bergen County; population; 687. Members and Officers— C. E. Breckenridge, President; Henry Heck, G. Berroyer, Joseph H. Burr, G. M. Fetzer, Clerk and Registrar; Alex. Grassick, Inspector.

Merchantville, Camden County; population, 1,632. Members and Officers—F. W. Kleinz, President; A. H. Moses, J. E. Vankirk, J. W. Lawrence, M.D., John Gunnison, W. B. Stewart, Clerk and Registrar; Wm. Linderman, Inspector.

Metuchen, Middlesex County; population, 1,907. Members and Officers—A. C. Kelly, President; F. M. Orton, H. Gross, M.D., R. B. Crowell, A. L. Ellis, M.D., Secretary and Registrar.

Midland Park, Bergen County; population, 1,617. Members and Officers—Thomas Holt, President and Registrar, Midland Park; John Klopman, Wortendyke; Jacob Leenas, Clerk, Wortendyke; Joseph Payne, M.D., Inspector, Midland Park.

Millstone, Somerset County; population, 156. Members and Officers—S. O. B. Taylor, M.D., President and Inspector; W. C. Kitchen, E. M. Davis, John P. Ditmars, W. H. Polhemus, Clerk; George C. Kitchen, Registrar.

Militown, Middlesex County; population, 1,210. Members and Officers—Conrad Wagner, President, Milltown; Adam Wagner, Milltown; Henry Kuhlthan, Milltown; Charles Baurice, Milltown; Milton Brindle, Milltown; Wm. G. Evans, Clerk, Milltown; Rob't A. Harkins, Registrar, Milltown; F. E. Riva, M.D., Inspector, New Brunswick.

\*Montvale, Bergen County; population, 502. Members and Officers—Paul Pratt, Secretary and Registrar.

\*Mount Arlington, Morris County; population, 250. Members and Officers—H. C. Upchurch, M.D., Secretary.

Mountainside, Union County; population, 314. Members and Officers—Louis S. Robbins, Assessor.

\*Mount Tabor, Morris County; population, —. Members and Officers—Frank S. Waller, Secretary.

National Park, Gloucester County; population, 160. Members and Officers—Adam Tuttle, President; Stephen Abdill, Thomas Platt, Thomas Burris, Adolphus S. Dean, Clerk.

Neptune City, Monmouth County; population, 808. Members and Officers—J. B. McNulty, President, Avon; James Estell, Bradley Beach; S. H. Hendricks, Bradley Beach; John Palmer, Avon; J. H. Leming, Clerk and Registrar, Avon.

\*Netcong, Morris County; population, 1,024. Members and Officers—Chas. W. Eaton, Secretary.

New Providence, Union County; population, 754. Members and Officers—Alfred G. Nason, President, Murray Hill; Frank Schwarzwaelder, Murray Hill; Albert E. Jackson, West Summit; William T. Hickson, New Providence; William Woodruff, Clerk and Registrar, New Providence; John R. Burnett, Jr., Inspector, New Providence.

North Caldwell, Essex County; population, 483. Members and Officers—Charles B. Gould, President, Caldwell; Ralph C. Bach, Caldwell; Louis

<sup>\*</sup> No report received.

Kussmaul, Caldwell; William Little, Caldwell; Sherman Paddock, Clerk, Caldwell; Fred. L. Baldwin, Registrar, Caldwell.

Northfield City, Atlantic County; population, 688. Members and Officers—Joseph Lake, President, Northfield City; T. L. McConnell, Smith's Landing; Walter Heckman, Northfield City; Wm. Oxley, Northfield City; E. C. Duberson, Clerk and Registrar, Northfield City.

North Haledon, Passaic County; population, 697. Members and Officers—William Clowes, President; Wm. J. Ellis, Chas. Ellis, John Hay, Ralph S. Torbet, Samuel Clowes, Clerk and Registrar; A. A. Lydecker, M.D., Inspector, Haledon.

North Plainfield, Somerset County; population, 5,616. Members and Officers—J. O. Osgood, President; Thomas Doud, Andrew E. Kenny, D. Adams, A. H. Dundon, M.D., Secretary and Registrar; F. Dencklan, Inspector.

\*North Spring Lake, Monmouth County; population, ——. Members and Officers—F. M. Hunt, Registrar, Spring Lake Beach.

Norwood, Bergen County; population, 432. Members and Officers—Henry Elling, President, Demarest; Wm. Harra, West Norwood; A. Portz. Closter; Josh. Wood, Norwood; Paul Luebkert, Clerk and Register, Norwood; A. W. Ward, M.D., Inspector, Closter.

\*Nutley, Essex County; population, 4,556. Members and Officers—

F. Clements, Secretary.

\*Oakland, Bergen County; population, 586. Members and Officers—W. B. Romaine, Secretary.

Oaklyn, Camden County; population, 454. Members and Officers— J. F. Johnson, President; W. E. Anthony, Francis Ashdale, William Link, Emil C. Hessert, Clerk and Registrar.

Ocean City, Cape May County; population, 1,835. Members and Officers—Chas. E. Edwards, M.D., President; N. Howard Burt, M.D., I. N. Griscom, M.D., Chas. B. Rider, M.D., E. W. Burleigh, T. Lee Adams, Clerk, Registrar and Health Officer; J. W. Smith, Sanitary Inspector.

Ocean Grove, Monmouth County; population, —. Members and Officers—A. E. Ballard, President; J. H. Alday, M.D., W. H. Wardell, E. N. Cole, H. B. Alday, M.D., Clerk and Inspector.

\*Old Tappan, Bergen County; population, 280. Members and Officers—R. B. Haring, Secretary and Registrar, Tappan, N. Y.

Orvil, Bergen County; population, 443. Members and Officers—Robert B. Potts, President; Wm. H. Leazer, Wm. H. Rossell, James C. H. Sherwood, Francis C. Kopp, Clerk and Registrar; Charles W. Harreys, Inspector, Ridgewood.

Palisades Park, Bergen County; population, 911. Members and Officers—Henry Prigge, President; B. Steenland, Wm. Sehner, A. C. Bross, W. F. Holt, Clerk and Registrar.

Park Ridge, Bergen County; population, 1,189. Members and Officers—H. C. Neer, M.D., President; J. A. Moenig, M.D., J. H. Stark, J. G. Forbes, Clerk and Registrar; C. E. Terhune, Inspector.

Paulsboro, Gloucester County; population, 2,269. Members and Officers—W. H. Pounds, M.D., President; John H. Brown, Wilmer Leap, Jacob Ballenger, Clerk and Registrar; Geo. C. Laws, M.D., Inspector.

Pemberton, Buriington County; population, 821. Members and Officers—A. J. Morris, President; J. G. Montgomery, J. N. Clevenger, Harry Ridgway, John B. Nutt, J. J. Brander, Clerk and Registrar.

<sup>\*</sup> No report received.

Pennington, Mercer County; population, 768. Members and Officers—Geo. W. Scarborough, President; Joseph C. Bunn, Frank A. Blackwell, Peter A. Caughell, Henry L. Laning, Clerk.

\*Pennsgrove, Salem County; population, 2,062. Members and Officers—C. P. Lummis, M.D., Secretary.

\*Pleasantville, Atlantic County; population, 2,824. Members and Officers—Wilbur Reed, Secretary.

Point Pleasant, Ocean County; population, 977. Members and Officers—Abraham Lower, Registrar.

Pompton Lakes, Passaic County; population, 1,013. Members and Officers—John E. Schuyler, Pompton Lakes; Frank L. Dufford, Pompton Lakes; E. J. Davies, Pompton; John Crawford, Pompton Lakes; R. G. Malloy, Fompton Lakes; Horace L. Wells, Secretary and Registrar, Pompton Lakes.

\*Port Republic City, Atlantic County; population, 451. Members and Officers—W. C. Van Sant, Secretary and Registrar.

Princeton, Mercer County; population, 6,029. Members and Officers— E. H. Loomis, President; A. A. Woodhull, R. Rowland, Jos. Hoff, B. Stockton, W. S. MacLaren, W. B. Howe, Clerk and Registrar; V. D. Bayles, Inspector.

Prospect Park, Passaic County; population, 1,911. Members and Officers—Alfred Mcauly, President; John Crawford, John Boer, Jacob Doele, Clerk and Registrar: A. A. Lydecker, M.D., Inspector, Haledon.

Raritan, Somerset County; population, 3,944. Members and Officers—L. M. Lanning, M.D., President, Somerville; Thomas P. Traynor, Raritan; John Fahey, Raritan; Joseph Naratto, Raritan; Geo. M. Brightbill, Secretary and Registrar, Raritan; Michael Corcoran, Inspector, Raritan.

Ridgefield, Bergen County; population, 745. Members and Officers— H. G. Henwood, President; J. G. McGill, E. Robinson, J. C. Banta, B. F. Underwood, Clerk and Registrar.

\*Riverside, Bergen County; population, 670. Members and Officers—Wm. W. Herrick, M.D., Clerk, River Edge.

Riverton, Burlington County; population, 1,557. Members and Officers—John C. S. Davis, President; C. C. Rianhard, H. P. Wyman, Chas. S. Mills, Alex. Marcy, Jr., M.D., Clerk and Inspector; Jacob Cottrell, Registrar.

\*Rockaway, Morris County; population, 1,585. Members and Officers—Wm. A. Parliman, Registrar.

Rocky Hill, Somerset County; population, 479. Members and Officers—John H. Tilton, President; W. N. Stults, A. E. Hahns, E. R. Logan, Clerk; A. C. Skirm, Registrar.

Roosevelt, Middlesex County; population, —. Members and Officers—Ed. J. Heil, President, Carteret; Isador Shwartz, Chrome; Adolph Groohman, Chrome; Frank Born, Clerk, Carteret; C. C. Sheridan, Registrar, Carteret.

Roseile, Union County; population, 2,142. Members and Officers—Henry C. Pierson, M.D., President; Minot W. Sewall, Wm. B. Hadley, James W. Hope, Wm. J. D. Chandler, Secretary; Geo. W. Rawlins, Registrar; John Kinney, Inspector.

Roselle Park, Union County; population, 2,236. Members and Officers—S. W. Kingsland, President; Chas. Engelhard, Patrick Cooley, Henry Bangert, Fred'k E. Nichols, Clerk and Registrar; Simon Birmingham, Inspector.



<sup>\*</sup> No report received.

Rutherford, Bergen County; population, 5,218. Members and Officers—F. M. Buckler, President; J. C. Sares, Chas. Calhoun, M.D., Geo. F. Schermerhorn, Frank Fleming, Geo. W. Lawton, Clerk and Registrar; Geo. K. Thomas, Inspector.

Saddle River, Bergen County; population, 474. Members and Officers—Andrew Esler, President; Cooper Ackerman, Wm. Blackledge, Robert T. Wilson, James L. Ackerman, Clerk and Registrar; Alfred Van Nostrand, Inspector.

Seabright, Monmouth County; population, 1,166. Members and Officers—A. J. Slocum, President; Edward Peterson, James P. Armstrong, Clerk.
Sea isle City, Cape May County; population, 432. Members and Officers—A. L. Steelman, President; W. Harry Hambleton, Clerk and Registrar; H. J. Steinus, M.D., Inspector.

Seaside Park, Ocean County; population, 92. Members and Officers—Chas. Harker, M.D., President; C. B. Coles, G. H. Thatcher, Clerk and Registrar; L. J. Stone, Inspector.

\*Secaucus, Hudson County; population, 3,191. Members and Officers—Chas. Maier, Secretary.

Somers Point, Atlantic County; population, 431. Members and Officers—John Townsend, President; David Robinson, Eph. Cowley, H. C. Fleming, Lewis Mason, James E. Scull, Registrar and Inspector.

\*South Amboy, Middlesex County; population, 6,258. Members and Officers—F. E. De Graw, Secretary and Registrar.

South Atlantic City, Atlantic County; population, 115. Members and Officers—Anthony Gertzen, Jr., President; John Gertzen, Geo. A. McClain, Edward McCanen, B. A. Whittaker, Clerk.

\*South Cape May, Cape May County; population, 5. Members and Officers—James Ritchie, Mayor.

South River, Middlesex County; population, 3,585. Members and Officers—A. W. Bissett, President; Charles Anderson, Jesse Selover, Clerk; J. C. Bowne, Registrar; R. V. Reid, Inspector.

Spring Lake, Monmouth County; population, 1,039. Members and Officers—S. R. Knight, M.D. President; J. G. Newman, D. H. Hills, Clerk and Registrar; E. W. Remsen, Inspector.

Stanhope, Sussex County; population, 887. Members and Officers—Isaac Kinnicutt, President; J. J. Shaw, John McMickle, John Slaught, T. E. Haggerty, Frank Todd, Clerk; C. K. Davison, M.D., Inspector.

Stockton, Hunterdon County; population, 588. Members and Officers—H. M. Reading, President; H. B. Neice, P. A. Shepherd, W. W. Johnson, John S. Wilson, Clerk; P. E. Rockafellow, Registrar and Inspector.

\*Sussex, Sussex County; population, 1,318. Members and Officers—S. F. Quince, Secretary.

Swedesboro, Gloucester County; population, 1,484. Members and Officers—T. B. Turner, M.D., President and Inspector; Frederick Weber, Wm. A. Homan, W. H. Rieger, Clerk and Registrar.

Tenafly, Bergen County; population, 2,142. Members and Officers—J. J. Haring, M.D., President; R. Delahanty, W. Bogert, W. R. Cattelle, Clerk; J. B. W. Lansing, M.D., Registrar and Inspector.

\*Totowa, Passaic County; population, 738. Members and Officers—Wilhur De Mott, Secretary and Registrar, Paterson.

\*Tuckerton, Ocean County; population, 1,332. Members and Officers—J. F. Mathis, Secretary.

<sup>\*</sup> No report received.

Upper Saddle River, Bergen County; population, 324. Members and Officers—John G. Carlough, President; Geo. E. Goetschins, C. O. Kramer, Wm. T. Post, John Swartz, John E. Berdan, Secretary.

Ventnor City, Atlantic County; population, 116. Members and Officers—Frank R. Scull, President; Gilbert Harris, C. Stanley Grove, John F. Snyder, William Kuhl, Clerk and Registrar; Benj. F. Hilliard, Inspector.

Verona, Essex County; population, —. Members and Officers—Wm. J. Whittaker, President; Louis C. Miller, Wm. A. Schneider, Chas. M. Bloxham, Judson W. Parker, Clerk; Chas. S. Simonson, Registrar.

Vineland, Cumberland County; population, 4,593. Members and Officers—W. S. Dungan, President; W. F. McKillup, George Lawley, A. Larricks, C. M. Gray, M.D., Clerk and Registrar; J. H. Winslow, Inspector.

\*Wallington, Bergen County; population, 2,475. Members and Officers—James Brennan, Secretary and Registrar.

Washington, Warren County; population, 3,431. Members and Officers—Chas. M. Williams, M.D., President; Henry Johnston, F. P. McKenstry, M.D., F. J. La Rieu, M.D., Daniel V. Wyckoff, Wesley Fleming, A. J. Craft, Clerk and Registrar; A. J. Bigler, Inspector.

Wenorah, Gloucester County; population, 569. Members and Officers—Wm. J. Dawson, President; Wm. C. Cottell, Chas. H. Larence, M.D., A. D. Harlan, Jesse W. English, Clerk and Registrar; Harry W. Stout, M.D., and S. J. Chew, Inspectors.

West Caldwell, Essex County; population, 490. Members and Officers—Marcus S. Crane, President, Caldwell; George M. Canfield, Caldwell; C. A. Harrison, Caldwell; John R. Jacobus, Secretary, West Caldwell; Theo. Gray, Caldwell; Clifton C. Francisco, Registrar, Caldwell; Christian Herzog, Inspector, Caldwell.

West Cape May, Cape May County; population, 902. Members and Officers—Harvey Shaw, President, Eldredge; Jacob Smallwood, Eldredge; Thos. H. Hughes, Eldredge; Wm. S. Smith, Eldredge; John D. Craig, Clerk, Eldredge.

Westwood, Bergen County; population, 1,044. Members and Officers— J. J. Voorhis, President; C. E. Harring, J. W. Horn, R. Myers, N. Cleveland, Clerk, Registrar and Inspector; J. B. Speth, Plumbing Inspector.

Wharton, Morris County; population, 2,285. Members and Officers— Henry W. Kice, M.D., President; Robert F. Oram, Miller Castner, James Williams, Clerk; Daniel J. Kettrick, Inspector.

\*Wildwood, Cape May County; population, 500. Members and Officers—C. Eldredge, Clerk and Registrar.

\*Woodbine, Cape May County; population, 1,850. Members and Officers—Louis Shapiro, Secretary.

Woodcliff, Bergen County; population, 477. Members and Officers—Wm. English, President, Woodcliff; John H. Wortendyke, Woodcliff; Augustus Cleveland, Woodcliff; David H. Tice, Allendale; Peter E. Van Riper, Allendale; G. J. Wortendyke, Clerk, Allendale, R. F. D. No. 2.

Wood Lynne, Camden County; population, 388. Members and Officers—George Annesley, President; Andrew Burnside, Claude Davis, Frank G. Muggleworth, Clerk and Registrar; Frank E. Meredith, Inspector.

Wood Ridge, Bergen County; population, 721. Members and Officers— J. H. Schmitt, President; F. C. Ball, J. C. Dorflinger, F. W. Lehmann, Clerk and Registrar; Geo. Holtz, Inspector.

<sup>\*</sup> No report received.

Woodstown, Salem County; population, 1,500. Members and Officers—Isaac A. Coles, President; Henry V. Foster, Wm. Coleman, E. P. McGeorge, M.D., Chalkley Haines, Wm. B. Foster, Clerk; H. H. Stepler, Registrar; F. P. Vanlier, Inspector.

#### TOWNS.

Absecon, Atlantic County; population, 616. Members and Officers—T. J. Hamilton, President; Henry Alexander, Samuel Giberson, Samuel Johnson, Clerk and Registrar; E. H. Madden, M.D., Inspector.

\*Bloomfield, Essex County; population, 11,668. Members and Officers

-Wm. L. Johnson, Secretary.

\*Boonton, Morris County; population, 3,935. Members and Officers—N. A. Meyers, Secretary.

Freehold, Monmouth County; population, 3,064. Members and Officers— E. D. Clayton, President; W. A. Barkalow, H. S. Brown, M.D., S. L. Bennett, Alonzo White, H. W. Ingling, Clerk; Alonzo Brower, Registrar and Inspector.

\*Guttenberg, Hudson County; population, 4,563. Members and Officers—

Hackettstown, Warren County; population, 2,594. Members and Officers—A. C. Van Syckle, M.D., President; J. W. Curtis, Thomas Nolan, Alfred Hoffman, A. G. Boettiger, Clerk and Registrar; R. G. Clark, Inspector.

\*Hammonton, Atlantic County; population, 4,334. Members and Officers—J. L. O'Donnell, Clerk and Registrar.

Harrison, Hudson County; population, 12,824. Members and Officers—John T. Malone, President; Henry Allers, M.D., Peter J. Goodman, Nathaniel Comey, John J. Scannell, Clerk; John T. McClure, Inspector.

Irvington, Essex County; population, 7,180. Members and Officers—Jonah Hardgrove, President; Hugo R. Winkler, Charles Bougas, Ackerman States, Julias Bartosch, Edwin Berry, Clerk.

Kearny, Hudson County; population, 13,601. Members and Officers—Louis Hartung, President, Kearny; Nevin Kennedy, Kearny; M. W. Clouse, M.D., Kearny; John R. O'Connor, Arlington; Carl F. Zachan, Arlington; Leonard F. Philiky, Clerk, Arlington; Charles Schiller, Registrar, Kearny; Albert E. Geissler, Inspector, Arlington; James A. Exton, M.D., Health Officer, Arlington; Dr. S. G. Hender, Inspector, Arlington.

\*Keyport, Monmouth County; population, 3,385. Members and Officers—Rufuo O. Walling, Clerk.

\*Red Bank, Monmouth County; population, 6,263. Members and Officers—B. H. Garrison, M.D., Secretary.

Somerville, Somerset County; population, 4,782. Members and Officers—Aaron L. Stillwell, M.D., President; Thomas L. Flynn, M.D., John B. Osbourn, Wm. V. Steele, Wm. R. Sutphen, Secretary and Registrar; George D. Totten, Inspector.

\*Town of Union, Hudson County; population, 17,005. Members and Officers—Wm. Menger, M.D., Inspector.

Westfield, Union County; population, 5,265. Members and Officers—Joseph B. Harrison, M.D., President; Homer H. Butler, Sherman Cooper, M.D., Geo. Delatour, C. W. Harden, Clerk, Registrar and Inspector.

<sup>\*</sup> No report received.

\*West Hoboken, Hudson County; population, 29,082. Members and Officers—A. J. Stanton, Secretary.

West New York, Hudson County; population, 7,196. Members and Officers—James J. Benson, M.D., President; Rudolf Kunze, George Therbold, George Yhlen, John H. Everly, Clerk.

West Orange, Essex County; population, 7,872. Members and Officers—Joseph B. F. Grady, President; David Quinlan, John B. Lander, Henry J. Fiendt, Benj. L. Williams, Clerk and Registrar; Joseph Fleming, James M. Maghee, M.D., and A. W. Kinney, Inspectors.

## VILLAGES.

Ridgefield Park, Bergen County; population, —... Members and Officers—J. H. Ticken, President; Joseph Fletcher, C. W. F. Muenchlhofe, G. J. Muller, Frank L. Vrooman, Secretary; C. A. Knox, Health Inspector; L. A. Olsen, Plumbing Inspector.

Ridgewood, Bergen County; population, 3,980. Members and Officers—John B. Hopper, President and Registrar; Wm. H. Moore, Edward T. White, H. S. Willard, M.D., John T. Hanks, Secretary; H. H. Pettit, M.D., Health Officer; G. H. Soult, Plumbing Inspector.

South Orange, Essex County; population, 4,932. Members and Officers—Mefford Runyon, M.D., President; Richard D. Freeman, M.D., Henry A. Pulsford, M.D., Francis Speir, Jr., Wm. T. Baird, Edwin S. Allen, Secretary; A. C. Benedict, Registrar and Inspector; H. C. Hoskier, Dairy Inspector.

#### TOWNSHIPS.

\*Acquackanonk, Passaic County; population, 7,187. Members and Officers—Richard Berry, Clerk, Clifton.

Alexandria, Hunterdon County; population, 1,007. Members and Officers—'T. C. Cronce, President, Everittstown; Wm. V. Bloom, Little York; Joseph Hoff, Everittstown; John C. Wilson, Clerk, Everittstown; F. S. Grim, Inspector, Baptistown.

Allamuchy, Warren County; population, 571. Members and Officers—Geo. W. Guest, President, Allamuchy; Eli Deremer, Z. R. McMurtrie, Great Meadows; Benj. A. Hendershot, Clerk, Allamuchy; Geo. A. Jilson, Registrar and Inspector; L. C. Osmun, M.D., Inspector, Hackettstown.

Alloway, Salem County; population, 1,562. Members and Officers—Warren L. Ewen, M.D., President, Alloway; J. S. Watson, Yorktown; Chas. Timberman, Alloway; Jos. Garton, Cohansey; Wm. E. Simkins, Clerk and Registrar, Elmer, R. F. D. No. 3.

Andover, Sussex County; population, 478. Members and Officers—Wm. M. Slater, President, Newton; Calvin F. Rose, Newton; C. C. Cox, Lafayette; William Iliff, Clerk, Lafayette.

\*Atlantic, Monmouth County; population, 1,355. Members and Officers—J. H. Johnes, Clerk, Vanderburg.

\*Bass River, Burlington County; population, 728. Members and Officers—Jos. B. Lamson, Clerk, New Gretna.

Bedminster, Somerset County; population, 2,246. Members and Officers—Charles Hoffman, President, Pottersville; Chas. H. Tiger, Peapack;



<sup>\*</sup> No report received.

R. B. Duyckinck, Lamington; M. C. Smalley, M.D., Gladstone; J. B. Beekman, M.D., Bedminster; W. D. Vanderbeek, Secretary, Gladstone.

Belleville, Essex County; population, 7,632. Members and Officers—Edward O. Cyphers, M.D., President, Belleville; J. H. Breen, Belleville; Jos. Weston, Belleville; Joseph Joule, Belleville; Wm. Hirdes, Belleville; George Stanier, Belleville; John J. Honan, Clerk, Belleville; Henry W. Underwood, Registrar, Belleville; George Williamson, Inspector, Belleville.

Berkley, Ocean County; population, 558. Members and Officers—Thomas J. Harvey, President; Charles W. Ward, S. R. Johnson, Marcus-B. Allen, Clerk; Devine Butler, Registrar, Bayville.

Bernards, Somerset County; population, 4,514. Members and Officers—David Buist, President, Bernardsville; Fred. Sweickhardt, Bernardsville; John D. Cross, Lyons; Frank Bowman, Bernardsville; Julius Froehling, Liberty Corner; S. S. Baldwin, Clerk and Registrar, Liberty Corner; Dr. L. Tuttle, Inspector, Bernardsville.

Bethlehem, Hunterdon County; population, 1,594. Members and Officers—Joseph H. Painter, President, Valley; Hiram S. Opdycke, Valley; John C. Dalrymple, Valley; G. C. Lott, Clerk, Junction, R. F. D.

Beverly Township, Burlington County; population, 2,181. Members and Officers—Wm. T. Baggs, President, Beverly; Alfred Heal, Beverly; Frank H. Story, Delanco; H. K. Weiler, M.D., Delanco; Jos. B. Carter, Registrar, Delanco.

Blairstown, Warren County; population, 1,537. Members and Officers—Henry P. Lindberry, President, Walnut Valley; Theodore Dawes, Blairstown; John E. Jones, Blairstown; Jos. A. Dugan, Clerk and Registrar, Vail; H. O. Carhart, M.D., Inspector, Blairstown.

Boonton, Morris County; population, 343. Members and Officers—James G. Simms, President, Boonton; Eben C. Lyon, Boonton; Cornelius Byrnes, Boonton; George W. Blanchard, Boonton; John L. Taylor, M.D., Boonton; Harry Gordon, Clerk and Registrar, Boonton; J. L. Hutt, Inspector, Boonton.

Bordentown, Burlington County; population, 534. Members and Officers—C. Mendanhall, M.D., President, Bordentown; C. F. Neese, Bordentown; Samuel Johnson, Bordentown; Dr. Hugh Le Jambre, Clerk, Registrar and Inspector, Bordentown.

Branchburg, Somerset County; population, 979. Members and Officers—Tunis Ten Eyck, President, North Branch; Wm. V. D. Jelliffe, North Branch Station; A. B. Brokaw, Neshanic Station; Augustus McCullough, Clerk and Registrar, North Branch Station; Henry V. Davis, M.D., Inspector, North Branch.

\*Brick, Ocean County; population, 2,112. Members and Officers—J. H. Harvey, Secretary and Registrar, Point Pleasant.

\*Bridgewater, Somerset County; population, 962. Members and Officers—F. T. Ross, Secretary and Registrar, Somerville.

Buena Vista, Atlantic County; population, 2,624. Members and Officers—Alfred Pennock, Sr., President and Registrar, Vineland; Edmund J. Smith, Richland; Harry Brown, Newtonville; Frank Barsuglia, Vineland; Douglas Reed, Clerk, Newfield, R. F. D.

Burlington, Burlington County; population, 1,012. Members and Officers—Wm. B. Shedaker. President, Burlington; Edward B. Deacon, Burlington; Ellis Parker, Burlington; Thos. B. Gandy, Clerk, Registrar and Inspector, Burlington.

<sup>\*</sup> No report received.

Byram, Sussex County; population, 426. Members and Officers—Jesse L. Roleson, President, Sparta; A. L. Cassedy, Waterloo; Hiram A. Stone, Andover; Charles McMickle, Clerk, Andover.

\*Caldwell, Essex County; population, 644. Members and Officers—Theo. Vincent, Registrar, Caldwell.

Centre, Camden County; population, 2,651. Members and Officers—Herbert K. Dobbs, President, Mount Ephraim; Sewell H. Hodges, Magnolia; Frank M. Lapierre, Magnolia; Leslie C. Lyons, M.D., Magnolia; John H. Jackson, Clerk and Registrar, Magnolia.

Chatham, Morris County; population, 629. Members and Officers—Louis M. Noe, President, Madison; Charles A. Johnson, Chatham; Edward W. Blazier, Green Village; C. W. Scarborrough, M.D., Madison; Nathaniel Clark, Clerk, Madison; J. H. Bebout, Registrar, Chatham.

Chester, Burlington County; population, 4,849. Members and Officers—Morris Linton, President, Moorestown; George Brock, Moorestown; George B. Hancock, Moorestown; Samuel C. Roberts, Moorestown; Eugene H. Hill, Moorestown; George W. Heaton, Clerk and Registrar, Moorestown; Frank G. Stroud, M.D., Inspector, Moorestown.

\*Chester, Morris County; population, 1,378. Members and Officers— H. M. Rarick, Clerk, Chester.

Chesterfield, Burlington County; population, 1,141. Members and Officers—Edward M. Ridgway, President, Crosswicks; Charles M. Bunting, Crosswicks; Charles E. Wallace, Chesterfield; William Wallace, Clerk, Crosswicks.

Cinnaminson, Burlington County; population, 1,064. Members and Officers—Clayton Conrow, President, Cinnaminson; Thomas E. Steele, Registrar, Palmyra; J. D. Janney, M.D., Inspector, Cinnaminson.

Clark, Union County; population, 387. Members and Officers—Henry Bender, President, Rahway; Andrew Gibson, Rahway; Wm. J. Thompson, Clerk, Rahway, R. F. D. No. 1.

Clementon, Camden County; population, 2,257. Members and Officers—Jacob C. Lippincott, President, Kirkwood; Geo. Summerfield, Clementon; Fred. Tomlinson, Laurel Springs; Geo. W. Evans, Clerk and Registrar, Lindenwold; Frank B. Cook, M.D., Inspector, Laurel Springs.

Clinton, Hunterdon County; population, 2,026. Members and Officers—Willard E. Berkaw, M.D., President and Inspector, Annandale; John Shurts, Lebanon; John W. Apgar, Lebanon; Mathias J. Wiggans, Annandale; Bergen B. Berkaw, Clerk and Registrar, Annandale.

Commercial, Cumberland County; population, 2,476. Members and Officers—C. W. Hand, President, Port Norris; Lewis F. Shropshire, Port Norris; E. B. Bradford, M.D., Port Norris; Reuben Sharp, Haleysville; Walter C. Riggin, Registrar, Port Norris; Thomas S. Ferguson, Inspector.

Cranbury, Middlesex County; population, 1,465. Members and Officers—Joseph C. Chamberlin, President, Cranbury; W. I. Stults, Cranbury; Walter Scott, Cranbury; A. M. Davison, Secretary and Registrar, Cranbury, R. F. D. No. 4.

Cranford, Union County; population, 3,600. Members and Officers— E. B. Horton, President, Cranford; J. C. W. Rankin, Cranford; E. G. Woodling, Cranford; Alfred H. Miller, Clerk and Inspector, Cranford; F. R. Swackhamer, Registrar, Cranford; J. L. Vail, M.D., Inspector, Cranford.

Deerfield, Cumberland County; population, 3,212. Members and Offi-

<sup>\*</sup> No report received.

cers—Elijah R. Parvin, President and Registrar, Deerfield; James McNabb, Deerfield; John Loper, Woodruff; Wm. Sharper, Rosenhayn; H. L. Cooper, M.D., Clerk, Deerfield.

Delaware, Camden County; population, 1,470. Members and Officers—Wm. Graff, President and Registrar, Haddonfield; Joseph Hinchman, Jr., Merchantville; J. W. Matlack, Haddonfield; Samuel R. Coles, Moorestown; Wm. T. Lippincott, Moorestown; Wm. B. Jennings, M.D., Clerk and Inspector, Haddonfield.

Delaware, Hunterdon County; population, 1,926. Members and Officers—Alton Lake, President, Sergeantsville; George H. Higgins, Sergeantsville; Irvin Johnson, Raven Rock; David L. Holcombe, Clerk and Registrar, Lambertville; Geo. N. Best, M.D., Inspector, Rosemont,

Deiran, Burlington County; population, 1,340. Members and Officers—Charles Baety, President, Bridgeboro; A. P. Bright, Bridgeboro; Jos. F. Denneler, Riverside; George Friday, Clerk and Registrar, Riverside.

Dennis, Cape May County; population, 1,777. Members and Officers—Samuel Bishop, President, Eldora; James G. Stiles, Dennisville; Eli Townsend, Clermont; I. S. Townsend, Clerk and Registrar, Clermont; Eugene Way, M.D., Inspector, Dennisville.

Deptford, Gloucester County; population, 2,233. Members and Officers—Thomas Goldy, President, Westville; Benjamin Hains, Westville; Ellison Turner, Sewell; Carroll C. Headley, Clerk and Registrar, Westville; H. H. Clark, M.D., Inspector, Woodbury.

Dover, Ocean County; population, 2,869. Members and Officers—Thos. B. Irons, President, Toms River; T. I. Grant, Toms River; W. Scott Jackson, Toms River; R. R. Jones, M.D., Toms River; U. S. Grant, Clerk, Toms River.

Downe, Cumberland County; population, 1,664. Members and Officers—John Gaskill, President, Newport; Luther Bateman, Newport; Wm. H. Townsend, Dividing Creek; Sheppard Campbell, Clerk, Newport.

Eagleswood, Ocean County; population, 534. Members and Officers—Howard G. Shinn, President, West Creek; J. W. Holman, West Creek; Jonathan Cox, West Creek; C. D. Conover, M.D., Tuckerton; E. F. Cranmer, Clerk, West Creek.

Eastampton, Burlington County; population, 587. Members and Officers—H. E. Lippincott, President, Smithville; S. M. McFarland, Mount Holly; Samuel Austin, Mount Holly; C. F. Holzbaur, Clerk and Registrar, Smithville; Geo. Van Derveer, M.D., Inspector, Mount Holly.

East Amwell, Hunterdon County; population, 1,256. Members and Officers—George Strimple, President, Ringoes; George B. Hartpence, Ringoes; George Bateman, Clover Hill; Joseph A. Snook, Clerk and Registrar, Hopewell, R. F. D.; P. C. Young, M.D., Inspector, Ringoes.

\*East Brunswick, Middlesex County; population, 2,025. Members and Officers—Henry Warnsdorfer, Secretary and Registrar, New Brunswick, R. F. D. No. 3.

East Greenwich, Gloucester County; population, 1,299. Members and Officers—Wm. Cook, President, Mount Royal; John C. Heritage, Mickleton; Daniel Packer, Mount Royal; J. C. Dauson, Clerk, Mickleton.

East Windsor, Mercer County; population, 863. Members and Officers—A. A. Ely, President, Hightstown; Furman Updike, Hightstown; E. R. Pickering, Hightstown; S. L. Mount, Registrar, Etra; C. M. Franklin, M.D., Inspector, Hightstown.

Eatontown, Monmouth County; population, 2,874. Members and Offi-



<sup>\*</sup> No report received.

cers—S. S. Stout, President, Eatontown; A. F. Golden, West Long Branch; Whitney Conrow, Oceanport; D. S. Morris, Clerk, Eatontown; Douglass Riddle, Registrar, Oceanport; E. W. Crater, M.D., Inspector, Oceanport.

Egg Harbor, Atlantic County; population, 1,468. Members and Officers—John J. Blackmon, President, Steelmanville; George W. Adams, Idlewood; John Smith, Scullville; George S. Winner, Clerk and Registrar, Scullville.

Elk, Gloucester County; population, 938. Members and Officers—Franklin Homan, Glassboro; Thomas Hann, Ewan; Sheppard Murphy, Monroeville; Samuel L. Seran, President and Clerk, Aura.

\*Elsinboro, Salem County; population, 398. Members and Officers—Wm. D. Griscom, Clerk, Salem.

Evesham, Burlington County; population, 1,356. Members and Officers—H. D. Lippincott, President, Marlton; J. J. Mitchell, Marlton; Wm. Dunphey, Marlton; W. W. Powell, Marlton; B. K. Brick, M.D., Secretary, Marlton.

Ewing, Mercer County; population, 1,560. Members and Officers—J. L. Knight, President, Trenton Junction; James F. Herbert, Trenton Junction; H. M. Fine, Trenton; E. B. Allen, M.D., Trenton; W. H. Cadwallader, Clerk and Registrar, Trenton, R. F. D. No. 1.

\*Fairfield, Cumberland County; population, 1,625. Members and Officers—E. H. Whiticar, Clerk, Fairton.

Fanwood, Union County; population, 1,341. Members and Officers—Ira G. Walker, President, Scotch Plains; W. S. Terry, Scotch Plains; Theo. Bruckman, Scotch Plains; W. R. Codington, Plainfield; George H. Johnston, Clerk and Registrar, Scotch Plains; F. W. Wescott, M.D., Inspector, Fanwood.

Florence, Burlington County; population, 1,967. Members and Officers—Harry Aikins, President, Florence; George Strick, Florence; Chester Emons, Florence; Robert Cottam, Clerk, Florence; Byron Carty, Registrar, Florence; David Baird, Jr., M.D., Inspector, Florence.

\*Frankford, Sussex County; population, 998. Members and Officers—Daniel Dalrymple, Registrar, Papakating.

Franklin, Bergen County; population, 1,566. Members and Officers—Wm. J. Packer, President, Midland Park; Andrew E. Voorhis, Wyckoff; Henry P. Winters, Wyckoff; Daniel Snyder, Clerk and Registrar, Midland Park; E. W. Hamilton, M.D., Inspector, Oakland.

Franklin, Gloucester County; population, 2,197. Members and Officers—A. B. Richman, President, Malaga; John Down, Malaga; Chas. Trimnell, Malaga; Harry C. Richman, Clerk and Registrar, Malaga; A. A. Smith, M.D., Inspector, Malaga.

Franklin, Hunterdon County; population, 1,105. Members and Officers—J. K. Trout, President, Pittstown; John E. Anderson, Pittstown; John H. B. Opdycke, Quakertown; Elwood Nixon, Clerk and Registrar, Quakertown; Q. E. Snyder, M.D., Inspector, Quakertown.

\*Franklin, Somerset County; population, 3,577. Members and Officers—L. J. Suydam, Secretary and Registrar, New Brunswick, R. F. D. No. 5. \*Franklin, Warren County; population, 1,309. Members and Officers—

P. B. Butterwick, Clerk, Asbury.

Fredon, Sussex County; population, 462. Members and Officers—Charles Roy, President, Newton; David R. Warbasse, Newton; John



<sup>\*</sup> No report received.

Roy, Newton; Jos. E. Huff, Clerk and Registrar, Newton, R. F. D. No. 1; E. E. Beatty, M.D., Inspector, Newton.

Freehold, Monmouth County; population, 2,474. Members and Officers—Robert N. Senter, President, Freehold; Millard F. Conover, Freehold; John H. Shepherd, Freehold; Louis S. Packard, Freehold; John Drum, Freehold; R. V. Lawrence, Clerk and Registrar, Freehold; Harry W. Ingling, M.D., Inspector, Freehold.

Frelinghuysen, Warren County; population, 728. Members and Officers—E. Vasbinder, President, Blairstown; Charley Lewis, Johnsonburg; David Rhyman, Marksboro; W. H. Ackerson, Clerk, Blairstown.

Galloway, Atlantic County; population, 1,876. Members and Officers—Edward Ertell, President, Pomerania; Harry A. Wickes, Pomerania; C. B. Somers, Oceanville; J. E. Smith, Secretary and Assessor, Oceanville.

Glassboro, Gloucester County; population, 2,607. Members and Officers—C. S. Heritage, M.D., President, Glassboro; W. H. Yenney, Glassboro; Josiah Shute, Glassboro; Jeptha T. Abbott, Clerk and Registrar, Glassboro; George Beminger, Inspector, Glassboro.

\*Gloucester, Camden County; population, 2,300. Members and Officers—Martin Schubert, Clerk and Registrar, Kirkwood.

Green, Sussex County; population, 500. Members and Officers—S. S. Coleman, President, Tranquility; A. Hull, Huntsville; A. E. Decker, Andover; I. L. Labar, Clerk and Registrar, Tranquility; J. C. Clark, Inspector, Andover.

Greenwich, Cumberland County; population, 1,122. Members and Officers—George L. Watson, President, Greenwich; Isaac D. Brown, Greenwich; David Reeves, Greenwich; S. M. Snyder, M.D., Greenwich; J. W. Butler, Clerk and Registrar, Greenwich.

Greenwich, Gloucester County; population, 754. Members and Officers—Wm. Wilson, President, Paulsboro; Henry Muwyar, Gibbstown; Edward Bates, Gibbstown; Jacob M. Allen, Clerk and Registrar, Gibbstown.

Greenwich, Warren County; population, 854. Members and Officers—Geo. E. Hawlen, President, Stewartsville; B. F. Strader, Stewartsville; John H. Cyphers, Stewartsville; F. W. Curtis, M.D., Stewartsville; Wm. Sherrer, Clerk, Bloomsbury.

Haddon, Camden County; population, 1,009. Members and Officers—Henry I. Wright, President, Westmont; Alfred M. Matthews, Westmont; Albert J. Cline, Westmont; James S. Williams, Clerk and Registrar, Westmont; E. B. Rogers, M.D., Inspector, Collingswood.

Hamilton, Atlantic County; population, 2,021. Members and Officers—C. D. Makepeace, President, Mays Landing; Joseph Bauer, Cologne; Daniel McClure, Mays Landing; Harry Jenkins, Clerk and Registrar, Mays Landing; H. C. James, Inspector, Mays Landing.

Hamilton, Mercer County; population, 5,150. Members and Officers—Edward B. Woodward, President, Yardville; William E. Ford, Crosswicks; Joel A. Cranmer, Trenton; Isaac Robbins, Trenton; Wm. T. Robbins, Clerk, Hamilton Square; Josiah T. Allinson, Registrar, Yardville; James N. Reed, Inspector.

Hampton, Sussex County; population, 623. Members and Officers—A. J. Williams, President, Baleville; M. H. Northrup, Baleville; J. A. Sigler, Halsey; J. W. Thompson, Clerk and Registrar, Blair.

Hanover, Morris County; population, 5,294. Members and Officers-

<sup>\*</sup> No report received.

Edwin C. Quinby, President, Registrar and Inspector, Whippany; A. M. Webb, Hanover; Phineas Farrand, Boonton; Charles Dennis, Boonton; Edward Connelly, Whippany; W. B. Davis, Morris Plains.

Hardwick, Warren County; population, 370. Members and Officers—Henry Kice, President, Hardwick; D. R. Newman, Blairstown; Wm. C. Wildrick, Marksboro; Marcus C. Hill, Secretary and Registrar, Blairstown; H. O. Carhart, M.D., Inspector, Blairstown.

Hardyston, Sussex County; population, 3,434. Members and Officers— J. F. Stephens, President, Franklin Furnace; Watson Little, Franklin Furnace; James McCue, Stockholm; Smith Simpson, Clerk, Hamburg.

Harmony, Warren County; population, 1,086. Members and Officers—H. B. Bossard, M.D., President and Inspector, Phillipsburg; George M. Amey, Phillipsburg; Elmer Cruts, Phillipsburg; J. M. Rush, Stewarts-ville; Freeman Schuler, Clerk and Registrar, Phillipsburg.

Harrington, Bergen County; population, 521. Members and Officers—Leonard B. Sneeden, President, Northvale; James Argenti, Northvale; Chas, F. Semino, Northvale; Emil Kober, Registrar, Northvale.

Harrison, Gloucester County; population, 1,624. Members and Officers—Samuel T. Stratton, President, Ewan; William Justice, Richwood; Nathan S. Seloyd, Mullica Hill; S. F. Ashcraft, M.D., Mullica Hill; Eli Heritage, Clerk, Richwood.

Hillsboro, Somerset County; population, 2,247. Members and Officers—Wm. M. Staats, President, Millstone; John Brokaw, Belle Mead; John V. M. Sutphen, Three Bridges; W. H. Merrell, M.D., Clerk and Registrar, South Branch; John H. Saums, Inspector, Somerville.

Hillsdale, Bergen County; population, 945. Members and Officers—George W. Saul, President, Hillsdale; Jenner Fast, Hillsdale; Albert Mohmking, Hillsdale; John W. Kinmouth, Clerk and Registrar, Hillsdale.

Hohokus, Bergen County; population, 3,107. Members and Officers—Henry A. Winter, President, Ramsey; John J. May, Ramsey; James H. Ramsey, Ramsey; Daniel S. Wanamaker, Clerk and Registrar, Ramsey; Raymond Kiefer, M.D., Inspector, Ramsey.

Holland, Hunterdon County; population, 1,528. Members and Officers—Wm. R. Sailor, President, Milford; George N. Becker, Milford; Charles R. Stull, Milford; A. Sinclair, Clerk, Milford; H. B. Vansyckel, Registrar, Mount Pleasant; W. R. Carpenter, M. D., Inspector, Milford.

\*Holmdel, Monmouth County; population, 1,221. Members and Officers—V. D. Kenney, Secretary and Registrar, Holmdel.

Hope, Warren County; population, 1,025. Members and Officers—George A. Henry, President, Great Meadows; George Stone, Delaware; E. Winters, Hope; Lewis C. Fleming, Clerk and Registrar, Townsbury; Walter Storm, M.D., Inspector, Hope.

Hopewell, Cumberland County; population, 1,840. Members and Officers—D. D. Davis, President, Shiloh; E. G. Ayars, Bridgeton; Edward D. Peny, Bridgeton; Walter L. Minch, Clerk and Inspector, Shiloh.

Hopewell, Mercer County; population, 3,209. Members and Officers—Joseph R. Burroughs, President, Pennington; David Stout, Hopewell; Isaac B. Scudder, Titusville; Charles H. Hart, Clerk and Registrar, Titusville; Wm. Radcliffe, M.D., Inspector, Pennington.

Howell, Monmouth County; population, 2,585. Members and Officers—Wm. P. Havens, M.D., President and Inspector, Farmingdale; B. M.

<sup>\*</sup> No report received.

Cooper, Lakewood; Robert H. Morris, Adelphia; Chas. E. Ferry, Farmingdale; James H. Butcher, Clerk and Registrar, Ardena.

Hudson County, Hudson County; population, 449,879. Members and Officers—John E. West, M.D., President; C. B. Converse, M.D., E. J. G. Valentine, M.D., C. J. Rooney, Clerk, all of Jersey City; John Connell, M.D., John H. Sullivan, A. H. Mansfield and John F. Nagle, Inspectors.

Independence, Warren County; population, 835. Members and Officers—W. H. McCormick, President, Hackettstown; A. B. Leigh, Great Meadows; Charles Rusling, Townsbury; F. W. Haggerty, M.D., Clerk, Vienna; W. K. Teel, Assessor, Vienna.

Jackson, Ocean County; population, 1,534. Members and Officers—Thos. H. Harker, President and Inspector, Cassville; A. C. Emley, Cassville; George C. Hankins, Vanhiseville; Albert Pearce, Jackson's Mills; Geo. C. Hankins, Clerk, Vanhiseville; W. S. Hendrickson, Registrar, Lakewood; Otto Thompson, M.D., Inspector, Cassville.

Jefferson, Morris County; population, 1,259. Members and Officers—Uhler Coil, President, Milton; Daniel Davenport, Milton; Harvey R. Davenport, Milton; Charles Chamberlain, Clerk, Woodport; John Walters, M.D., Inspector, Wharton.

Kingwood, Hunterdon County; population, 1,188. Members and Officers—Frank Fisher, President, Kingwood; Joseph Hann, Barbertown; Stanford Vanderbilt, Baptistown; Samuel J. Snyder, Secretary and Registrar, Flemington, R. F. D. No. 2; Frank S. Grim, Inspector, Baptistown.

Knowlton, Warren County; population, 1,222. Members and Officers—Theo. A. Beck, President, Hainesburg; Peter J. Young, Hainesburg; Charles Harris, Delaware; Milton De Witt, Registrar, Columbia.

Lacey, Ocean County; population, 653. Members and Officers—G. E. Wallace, M.D., President and Inspector, Forked River; B. F. Holmes, Forked River; George Frazee, Forked River; A. H. Grant, Forked River; B. F. Mathews, Clerk and Registrar, Forked River.

Lafayette, Sussex County; population, 619. Members and Officers— F. M. Pellet, President, Lafayette; J. D. Ackerson, Lafayette; R. D. Snook, Secretary, Lafayette; J. C. Strader, M.D., Inspector, Lafayette.

Lakewood, Ocean County; population, 4,265. Members and Officers—Jacob Skidmore, President, Lakewood; Luke Johnson, Lakewood; Clayton Hurley, Lakewood; Ernest E. Le Compte, Clerk, Lakewood; Richard B. Robbins, Registrar and Inspector, Lakewood.

Landis, Cumberland County; population, 5,351. Members and Officers—Waldo F. Sawyer, M.D., President, Vineland; Jos. W. Holt, Millville; Geo. D. Geiger, Vineland; W. I. Frost, Vineland; A. Crossman, Vineland; C. L. Bolles, Vineland; Henry Taylor, Clerk and Registrar, Vineland; J. H. Winslow, M.D., Inspector, Vineland.

Lawrence, Cumberland County; population, 1,730. Members and Officers—Ernest L. Mulford, President, Cedarville; David W. Sheppard, Cedarville; Peter Johnson, Cedarville; Louis M. Hogbin, Clerk, Cedarville; Furman B. Sheppard, Registrar, Cedarville.

Lawrence, Mercer County; population, 2,043. Members and Officers—John E. Gorden, President, Port Mercer; Wm. Farr, Lawrenceville; John C. Applegate, Princeton; Edwin Dewitt, M.D., Lawrenceville; Frank Pierson, Registrar, Lawrenceville.

Lebanon, Hunterdon County; population, 1,983. Members and Officers—William A. Alpaugh, President, High Bridge; Wm. T. Warman, Glen

Gardner; Edson C. Apgar, Califon; E. R. Waters, Clerk, Glen Gardner; A. S. Banghart, Registrar, Glen Gardner.

Linden, Union County; population, 1,096. Members and Officers—John P. Winans, President, Linden; Walter E. Mitchell, Linden; John E. Tucker, Linden; Frank B. Stimson, Clerk and Registrar, Linden; William T. Day, Inspector, Roselle.

\*Little Egg Harbor, Ocean County; population, 517. Members and Officers—Wm. Speck, Registrar, Tuckerton.

\*Little Falls, Passaic County; population, 3,079. Members and Officers—W. W. Wilson, Clerk, Little Falls.

Livingston, Essex County; population, 1,407. Members and Officers—B. W. Dickerson, President, Chatham; William H. Harrison, Roseland; George H. Parkhurst, Livingston; George E. De Camp, Clerk and Registrar, Roseland

Lodi, Bergen County; population, 1,061. Members and Officers—Chas. Foose, President, Wood Ridge; Frank Switz, Little Ferry; John Turick, Hackensack; Julius Pries, Clerk, Registrar and Inspector, Wood Ridge.

Logan, Gloucester County; population, 1,528. Members and Officers—Hugh M. Glincy, President, Bridgeport; Wm. F. Justice, Bridgeport; John H. Shoemaker, Repaupo; S. B. Platt, Registrar, Bridgeport; P. E. Stillwagon, M.D., Bridgeport.

Long Beach, Ocean County; population, 73. Members and Officers—Herbert Willis, M.D., President; Samuel Stiles, Moses Cranmer, Charles E. Sherborne, Clerk, Long Beach; Arthur Rider, Assessor, Beach Haven. \*Lopatcong, Warren county; population, 695. Members and Officers—E. Frank Cline, Registrar, Shimers.

Lower, Cape May County; population, 1,336. Members and Officers—George Dickinson, President, Erma; W. A. Lake, M.D., Erma; John C. Elliott, Cold Spring; Aaron Woolson, Fishing Creek; J. P. Mackissic, Clerk and Registrar. Cape May City.

Lower Alloways Creek, Salem County; population, 1,220. Members and Officers—John M. Pancoast, President, Hancock's Bridge; Isaac Haron, Canton; Albert M. Carll, Harmersville; F. B. Harris, M.D., Canton; Edward Hancock, Clerk and Registrar, Hancock's Bridge.

Lower Penn's Neck, Salem County; population, 1,327. Members and Officers—John Prinsen, President, Pennsville; Samuel Lecroy, Pennsville; David Dixon, Salem; Ellsworth L. Irelan, Secretary and Registrar, Pennsville.

Lumberton, Burlington County; population, 1,683. Members and Officers—A. E. Haines, President, Medford; W. A. Jones, Lumberton; Jacob Walter, Mount Holly; H. D. Culin, Clerk and Registrar, Mount Holly.

Madison, Middlesex County; population, 1,582. Members and Officers—Cornelius Berlew, President, Matawan; Ambrose Green, Old Bridge; I. C. Crandall, M.D., Old Bridge; James Fountain, Old Bridge; D. H. Brown, Clerk and Registrar, Old Bridge; Edward Barker, Inspector, Matawan.

Manalapan, Monmouth County; population, 1,392. Members and Officers—Edward Hendrickson, President, Englishtown; Joseph C. Sutphen, Tennent: Wm. C. Hartshorne, Freehold; Asher T. Applegate, M.D., Englishtown; Garret B. Conover, Clerk, Englishtown; Samuel C. Bowne, Registrar, Tennent.

<sup>\*</sup> No report received.

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Manchester, Ocean County; population, 785. Members and Officers—Cameron Rhoads, Lakehurst; Edward Crawford, Lakehurst; John Stults, Lakehurst; Harold Pittis, M.D., Clerk and Inspector, Lakehurst; Amos Bozarth, Registrar, Lakehurst.

Manchester, Passaic County; population, 2,277. Members and Officers—Andrew Van Riper, President, Haledon; Samuel Rogers, Haledon; Jos. B. Turner, Haledon; Emil Kuhn, Clerk, Haledon; Orosley Duncan, M.D., Inspector, Haledon.

Mannington, Salem County; population, 1,652. Members and Officers—Hon. John Tyler, President, Salem; Joseph R. Hackett, Salem; Aaron E. Fogg, Salem; Jonathan B. Grier, Clerk and Registrar, Salem.

Mansfield, Burlington County; population, 1,493. Members and Officers—G. Frank Harvey, President, Columbus; C. G. Kinsley, Columbus; Walter Kirby, Columbus; Jos. H. Armstrong, Clerk and Registrar, Columbus; A. H. Patterson, M.D., Inspector, Georgetown.

\*Mansfield, Warren County; population, 1,234. Members and Officers—Jacob Beaty, Clerk, Port Murray.

Martua, Gloucester County; population, 1,471. Members and Officers—Benj. Sharp, President, Sewell; John Kincend, Sewell; Benj. Sparks, Mantua; Wm. S. Hurff, Clerk and Registrar, Sewell; E. Z. Hillegas, Inspector, Mantua.

Marlboro, Monmouth County; population, 1,664. Members and Officers—Geo. A. Quackenbush, President, Englishtown; H. P. Hayward, Marlboro; David A. Baird, Marlboro; J. D. Ely, M.D., Clerk and Inspector, Marlboro; Walter McElwain, Registrar, Englishtown.

Matawan, Monmouth County; population, 1,365. Members and Officers—Ten Eyck Conover, President, Matawan; Michael Halleran, Matawan; Lewis H. Stemler, Matawan; Daniel Martin, Secretary, Matawan; Richard Hauser, Registrar, Cliffwood; Nathan Erwin, M.D., Inspector, Matawan.

Maurice River, Cumberland County; population, 2,133. Members and Officers—Charles Grossman, President, Port Elizabeth; Charles Champion, Dorchester; Charles Williams, Heislerville; Henry Reeves, Jr., Clerk and Registrar, Leesburg.

Medford, Burlington County; population, 2,030. Members and Officers—W. P. Haines, M.D., President and Inspector, Medford; L. L. Sharp, M.D., Medford; F. A. Braddock, Medford; Wm. Potts, Registrar, Medford.

Mendham, Morris County; population, 1,724. Members and Officers—M. M. Connet, President, Brookside; A. A. Parks, Brookside; M. S. Burnett, Chester; Alexander Cochran, Clerk, Brookside; Fred. H. Garrabrant, Registrar, Brookside; Geo. S. De Groot, M.D., Inspector, Mendham.

Middle, Cape May County; population, 2,584. Members and Officers—L. T. Garretson, President, Cape May Court House; V. N. Erricson, Dias Creek; L. T. Swain, Swainton; J. M. Dix, M.D., Cape May Court House; Joseph Camp, Clerk, Registrar and Inspector, Pierces.

Middletown, Monmouth County; population, 5,600. Members and Officers—John N. Johnson, Jr., President, Belford; Daniel W. Van Note, Belford; Frank Osborn, Middletown; John M. West, Middletown; Wm. H. Naylor, Navesink; Henry D. Smith, Clerk, Middletown; Omar Sickles, Registrar, Navesink; D. D. Hendrickson, M.D., Inspector, Middletown.

Midland, Bergen County; population, 1,465. Members and Officers-

<sup>\*</sup> No report received.

John G. Zabriskie, President, Rochelle Park; George E. Van Orden, Ridgewood; John W. Winters, Ridgewood; John D. Bogert, Clerk and Registrar, Ridgewood; Frank Freeland, M.D., Inspector, Maywood.

Millburn, Essex County; population, 3,182. Members and Officers—Richard Hopkins, President, Short Hills; W. Campbell, M.D., Short Hills; Henry S. Acken, Millburn; J. M. Drake, Clerk and Registrar, Millburn; Felix McGee, Inspector, Millburn.

Millstone, Monmouth County; population, 1,432. Members and Officers—Abijah B. Chamberlin, President, Perrineville; S. P. Dey, Perrineville; Geo. M. Davison, Perrineville; George J. Ely, Clerk and Registrar, Cranbury, R. F. D.; Wm. T. McMellen, M.D., Inspector.

Monroe, Gloucester County; population, 2,519. Members and Officers—Edward F. Evans, President, Williamstown; David S. Champion, Williamstown; James M. Tweed, Williamstown; James C. McClure, M.D., Williamstown; John W. McClure, Clerk, Williamstown.

Monroe, Middlesex County; population, 2,023. Members and Officers—C. A. Morse, President, Cranbury; Willard Forman, Jamesburg; John D. Butcher, Cranbury; Rob't R. Vandenbergh, Secretary, Prospect Plains; J. L. Suydam, M.D., Inspector, Jamesburg.

Montague, Sussex County; population, 661. Members and Officers—Timothy Shay, President, Hainesville; Jacob McCarty, Port Jervis, N. Y.; James C. Cole, Port Jervis, N. Y.; Geo. McCarty, Clerk and Registrar, Port Jervis, N. Y.

Montgomery, Somerset County; population, 1,504. Members and Officers—Henry A. Duryee, President, Blawenburg; C. B. Allshouse, Belle Mead; Jacob Boice, Harlingen; H. D. Terhune, Clerk, Belle Mead, R. F. D. No. 1.

Montville, Morris County; population, 1,650. Members and Officers— J. H. Capstick, President, Montville; W. A. Young, Montville; John Husk, Montville; J. M. Tice, Clerk, Montville; A. W. Berger, Registrar, Pine Brook.

Morris, Morris County; population, 2,660. Members and Officers—Thos. T. Sands, President, Morristown; Lewis E. Clark, Morristown; Watson A. Barton, Morris Plains; Edward F. Arnold, Morristown; J. Paul Jemieson, Clerk, Morristown.

Mount Laurel, Burlington County; population, 1,671. Members and Officers—Benj. M. Haines, President, Moorestown; Budd M. Horner, Masonville; J. Harvey Darnell, Moorestown; John Dugan, Clerk, Moorestown.

\*Mount Olive, Morris county; population, 1,098. Members and Officers—S. W. Salmon, Secretary and Registrar, Mount Olive.

Mullica, Atlantic County; population, 794. Members and Officers—Jesse R. Abbott, President and Assessor, Nesco; Charles Saalmann, Egg Harbor City; Alex. J. McKeone, Pleasant Mills; John Mick, Elwood; John T. Irving, Clerk, Elwood; Dr. Bitler, Inspector, Hammonton.

\*Neptune, Monmouth County; population, 9,357. Members and Officers—Wm. R. O'Brien, Secretary and Registrar, Asbury Park.

\*New Hanover, Burlington County; population, 960. Members and Officers—S. T. Horner, Registrar, Pointville.

New Providence, Union County; population, 456. Members and Officers—Henry S. Fullerton, President, Scotch Plains; E. B. Oechsner,



<sup>\*</sup> No report received.

Scotch Plains; Joseph Kuntz, Berkley Heights; P. G. Johnson, Clerk and Registrar, New Providence; F. W. Wescott, Inspector, Scotch Plains.

Newton, Sussex County; population, 4,422. Members and Officers—Warren H. Smith, M.D., President, Newton; Lewis J. Martin, Newton; Charles S. Steele, Newton; Philetus R. Van Horn, Clerk and Registrar, Newton; Israel L. Hallock, Inspector, Newton.

Northampton, Burlington County; population, 5,509. Members and Officers—T. L. Akins, President, Mount Holly; B. W. Zelley, Mount Holly; T. W. Nippins, Mount Holly; J. E. Elbertson, Mount Holly; F. B. Dill, Mount Holly; M. H. Girven, Clerk and Registrar, Mount Holly; R. H. Parsons, M.D., Inspector, Mount Holly.

North Bergen, Hudson County; population, 11,134. Members and Officers—Chas. Deetz, President, North Bergen; Henry Andes, Weehawken; A. Maltz, Weehawken; A. Markert, Weehawken; Charles McCollum, West Hoboken; Fred. Sternkopf, North Bergen; James Nolan, New Durham; Charles J. Morris, Clerk, Weehawken; Aug. Beherich, Inspector, West Hoboken; Geo. Bruce, Assessor, North Bergen.

North Brunswick, Middlesex County; population, 929. Members and Officers—A. Augustus Voorhees, President, New Brunswick; Peter Vansickle, New Brunswick; William Vincent, New Brunswick; Isaac V. Williamson, Clerk and Registrar, New Brunswick; John D. Ten Eyck, M.D., Inspector, Franklin Park.

North Hanover, Burlington County; population, 747. Members and Officers—Charles P. Chalender, President, Jacobstown; Richard Rilley, Wrightstown; Frank Warner, Chesterfield; Pearson Taylor, Clerk, Wrightstown.

North Plainfield, Somerset County; population, 693. Members and Officers—Albert Brokaw, President, Bound Brook; Benj. Clark, Scotch Plains; Wm. Titus, Watchung; A. P. Voorhies, Registrar, Plainfield; Emil Clementz, Inspector, Watchung.

Ocean, Monmouth County; population, 1,574. Members and Officers—Chas. J. Smith, President, Oakhurst; John R. Jeffrey, Oakhurst; John F. Woolley, Oakhurst; H. G. Van Note, Clerk, Oakhurst; E. M. Beach, M.D., Inspector, West Long Branch.

Ocean, Ocean County; population, 409. Members and Officers—J. R. Stokes, President, Waretown; Wm. B. Wilkins, Waretown; Irvie Camburn, Waretown; O. Brown, Clerk, Waretown.

\*Oldmans, Salem County; population, 1,374. Members and Officers—Levi C. Justice, Clerk, Pedricktown.

Orvil, Bergen County; population, 752. Members and Officers—W. H. Kent, President, Waldwick; H. G. Ackerman, Waldwick; Wm. A. Sharp, Waldwick; Chas. Pfitzner, Clerk and Registrar, Waldwick; S. E. Robinson, M.D., Inspector, Waldwick.

\*Overpeck, Bergen County; population, 2,850. Members and Officers—S. A. Wilcox, Registrar, Ridgefield Park.

Oxford, Warren County; population, 2,964. Members and Officers— L. B. Hoagland, President, Oxford; Isaac H. Snyder, Belvidere; John H. Hildebrant, Belvidere; Hanlon Gardner, Oxford; Michael Mountain, Clerk and Registrar, Oxford.

Pahaquarry, Warren County; population, 257. Members and Officers— Jason G. Spangenberg, President, Millbrook; Charles E. Lutz, Dunfield; Oliver Courtright Dunfield; Hiram Zimmerman, Registrar, Millbrook.

<sup>\*</sup> No report received.

Palisade, Bergen County; population, 1,042. Members and Officers—S. W. Richards, President, River Edge; I. H. Vanderbeck, Dumont; C. Ufheil, Peetzburg; Wm. Ely, Registrar, North Hackensack; J. E. Pratt, Inspector, Dumont.

Palmyra, Burlington County; population, 2,643. Members and Officers—James E. Russell, President, Palmyra; Frank W. Smith, Palmyra; Joseph A. Davis, Palmyra; Lewis L. Sharp, Palmyra; F. Blackburn, Clerk, Registrar and Inspector, Palmyra.

Passaic, Morris County; population, 2,163. Members and Officers—George B. Meeker, President, Millington; Henry Lindsley, Millington; Thomas F. Melee, Stirling; J. A. Havey, Clerk, Stirling; T. W. Bebout, M.D., Inspector.

Pemberton, Burlington County; population, 1,706. Members and Officers—Charles Kinsley, President, Brown's Mills; Victor Bush, Pemberton; Charles E. Woolston, Mount Holly; Barclay Seeds, Registrar, Pemberton.

Pensauken, Camden County; population, 3,957. Members and Officers—I. Hatch, President, Fish House; Gale Bennett, Delair; Dr. Loeling, Pensauken; Harry E. Horner, Clerk and Registrar, Merchantville; Job Pidgeon, Inspector, Pensauken.

\*Pequannock, Morris County; population, 1,674. Members and Officers—Alfred Gilland, Secretary and Registrar, Pompton Plains.

Pilesgrove, Salem County; population, 1,726. Members and Officers—S. A. Ridgway, President, Woodstown; Edgar C. Moore, Woodstown; Clement McAllister, Sharptown; Geo. H. Kirby, Clerk, Woodstown.

\*Piscataway, Middlesex County; population, 2,767. Members and Officers—M. J. Whitford, M.D., Clerk and Registrar, New Market.

Pittsgrove, Salem County; population, 2,514. Members and Officers— J. R. Kandle, President, Centreton; J. V. Miller, Palatine; John Dillmore, Monroeville; Geo. Schalick, Clerk, Registrar and Inspector, Centreton.

Plumsted, Ocean County; population, 1,241. Members and Officers—Dayton Hopkins, New Egypt; James Larkin, New Egypt; Elmer Errickson, New Egypt; George Hartshorn, Registrar, New Egypt.

Pohatcong, Warren County; population, 3,408. Members and Officers—John M. Crouse, President, Finesville; John H. Sherrer, Finesville; Johnson Hummer, Alpha; Isaac Borts, M.D., Alpha; Harry E. Boyer, Clerk and Registrar, Springtown.

Pompton, Passaic County; population, 2,981. Members and Officers—James H. Vreeland, President, Hewitt; Walter C. White, Butler; James C. Sloat, Midvale; David Beam, Clerk and Registrar, Midvale; D. N. Shippee, M.D., Inspector, Wanaque.

Princeton, Mercer County; population, 1,144. Members and Officers— E. H. Bergen, M.D., President and Inspector, Princeton; M. T. Pyne, Princeton; R. M. Terhune, Princeton; James Margerum, Princeton; J. H. Hulit, Clerk, Princeton, R. F. D. No. 3; W. B. Howe, Registrar, Princeton

\*Quinton, Salem County; population, 1,135. Members and Officers—Josiah 'P. Harris, Clerk, Quinton.

Randolph, Morris County; population, 2,327. Members and Officers—Wm. Kinney, President, Mine Hill; John Griffin, Mine Hill; Walter S. Hilles, Dover; Geo. W. Crane, Clerk, Dover; Irving G. Bryant, Registrar, Dover; D. H. Dalrymple, Inspector, Dover.

<sup>\*</sup> No report received.

Raritan, Hunterdon County; population, 3,861. Members and Officers—Lafayette Jordy, President, Flemington; John Kunsman, Flemington; George F. Green, Flemington; W. S. Buchanan, Clerk and Registrar, Flemington; John H. Ewing, M.D., Inspector, Flemington.

Raritan, Middlesex County; population, 2,612. Members and Officers—John J. Gogswell, President, New Brunswick; Peter Lott, Metuchen; Edward Pfeiffer, Fords; Wm. T. Woerner, Clerk, New Brunswick, R. F. D. No. 1.

Raritan, Monmouth County; population, 1,473. Members and Officers—Augustus Maurer, President, Keyport; Frank Mason, Keyport; Abram Huylar, Keyport; Charles F. Tuthill, Keyport; Rufus O. Walling, Clerk, Keyport; Wm. C. Smith, Registrar, Keyport; James M. Walling, Inspector, Keyport.

\*Readington, Hunterdon County; population, 2,423. Members and Officers—J. C. Voorhees, Clerk, White House Station.

\*Ridgefield, Bergen County; population, 745. Members and Officers—Thomas F. Mallon, Registrar, Coytesville.

Riverside, Burlington County; population, 3,301. Members and Officers—Henry Taubel, President, Riverside; Wm. Mathias, Riverside; John Leech, Riverside; Charles Heiss, Clerk, Riverside; C. Lambert, M.D., Inspector, Riverside.

\*Rivervale, Bergen County; population, —... Members and Officers—C. H. De Voe, Registrar, Rivervale.

\*Rockaway, Morris County; population, 5,153. Members and Officers—Thos. Grant, Registrar, Hibernia,

\*Roxbury, Morris County; population, 2,323. Members and Officers—Thos. K. Wilkison, Clerk, Ledgewood.

Saddle River, Bergen County; population, 2,048. Members and Officers—Geo. Boyce, President, Fair Lawn; T. W. Vreeland, Arcola; Otto Pehl, Rochelle Park; Isaac A. Hopper, Clerk and Registrar, Fair Lawn.

Sandyston, Sussex County; population, 872. Members and Officers—Warren Van Sickle, President and Registrar, Bevans; Dennis Aber, Hainesville; John Jagger, Hainesville; Edward Snook, Layton; M. D. Hughes, M.D., Clerk, Branchville.

Sayreville, Middlesex County; population, 4,779. Members and Officers—August Rohde, President, Sayreville; William Burke, Sayreville; Henry Arfeth, Sayreville; J. H. Beekman, M.D., Sayreville; Thos. Creamer, Clerk and Registrar, Sayreville; Patrick Farley, Inspector, Sayreville.

\*Shamong, Burlington County; population, 508. Members and Officers —Mahlon Prickett, Registrar, Indian Mills.

Shrewsbury, Monmouth County; population, 5,502. Members and Officers—A. L. Ivins, President, Red Bank; Wm. H. Houston, Red Bank; Wm. A. Van Schoick, Red Bank; George D. Cooper, Red Bank; John M. Corlies, East Oceanic; Forman R. Smith, Fair Haven; A. C. Harrison, Clerk, Red Bank; A. L. Ivins, Registrar, Red Bank; Wm. Churchin, Inspector, Fair Haven.

\*Southampton, Burlington County; population, 1,860. Members and Officers—Lewis S. Brown, Registrar, Vincentown.

South Brunswick, Middlesex County; population, 2,489. Members and Officers—Wm. H. Gulick, President, Kingston; J. H. Stults, Cranbury;

<sup>\*</sup> No report received.

J. B. Rowland, Monmouth Junction; Wm. Perkins, Clerk and Registrar, Princeton.

South Harrison, Gloucester County; population, 680. Members and Officers—Richard D. Ridgway, President, Mullica Hill; George F. Wilkinson, Harrisonville; Mathew Allen, Harrisonville; D. C. Lippincott, Clerk, Harrisonville; Samuel Ashcraft, M.D., Inspector, Mullica Hill.

South Orange, Essex County; population, 1,946. Members and Officers—Wm. H. Kemp, President, Maplewood; H. Stacy Smith, Maplewood; Wm. A. Greenaway, Hilton; B. B. Ranson, M.D., Maplewood; Edward R. Arcularius, Clerk, Hilton; Thomas C. Baker, Registrar, Maplewood; Elvia Scott, Inspector, South Orange.

Sparta, Sussex County; population, 1,613. Members and Officers—Wm. Vanblarcom, President, Sparta; R. H. Earl, Sparta; Geo. Vanblar-com, J. W. Maseker, Clerk and Registrar, Sparta.

Springfield, Burlington County; population, 1,323. Members and Officers—Geo. J. Harker, President, Jobstown; Clayton Hancock, Columbus; Philip N. Haines, Burlington; J. E. Dubell, M.D., Columbus; John B. Tilton, Clerk, Wrightstown.

Springfield, Union County; population, 1,123. Members and Officers—Robert Morrison, President, Springfield; Richard Triviett, Springfield; Fred. Kenley, Springfield; Lewis T. Terry, Secretary and Registrar, Springfield; W. M. Barns, M.D., Inspector, Springfield.

\*Stafford, Ocean County; population, 994. Members and Officers—John B. Courtney, Clerk, Manahawkin.

Stillwater, Sussex County; population, 815. Members and Officers—Alvin Ray, President, Stillwater; John R. Kice, Stillwater; Charles A. Lewis, Stillwater; O. Van Horn, Clerk and Registrar, Stillwater.

Stow Creek, Cumberland County; population, 855. Members and Officers—Asa Bitters, President, Roadstown; Charles Ware, Roadstown; Lewis Willis, Bridgeton; Belford M. Bonham, Clerk and Registrar, Roadstown.

Tabernacle, Burlington County; population, 462. Members and Officers—J. C. Haines, President, Vincentown; A. C. Taylor, Vincentown; Charles H. Alloway, Vincentown; Geo. H. Wisham, Registrar, Vincentown.

Teaneck, Bergen County; population, 1,222. Members and Officers—Wm. Bennett, President, Teaneck; Robert Stevenson, Teaneck; Cornelius Terhune, Teaneck; W. L. Middlemas, Clerk, Registrar and Inspector, Teaneck.

Tewksbury, Hunterdon County; population, 1,815. Members and Officers—Lewis L. Apgar, Lebanon; L. M. Hoffman, Califon; Jacob J. Neff, New Germantown; Hezekiah Philhower, Secretary and Registrar, Califon; Francis A. Apgar, M.D., Inspector, New Germantown.

Union, Bergen County; population, 2,188. Members and Officers—Charles J. White, President, Lyndhurst; John H. Burke, Lyndhurst; Edmund M. Grimes, Lyndhurst; Thomas E. Buckley, Clerk and Registrar, Lyndhurst; Louis Enlo, Inspector, Lyndhurst.

Union, Hunterdon County; population, 923. Members and Officers—G. R. Emery, President, Jutland; Edgar Allen, Pattenburg; Geo. B. Smith, Clinton; Morris Stockton, Clerk and Registrar, Pattenburg.

Union, Ocean County; population, 913. Members and Officers—Charles H. Reeve, President, Barnegat; John K. S. Cox, Barnegat; Edward W.

<sup>\*</sup> No report received.

Exel, Barnegat; E. R. Wills, Clerk and Registrar, Barnegat; Howard Conrow, Inspector, Barnegat.

Union, Union County; population, 2,614. Members and Officers—John H. Doremus, President, Lyons Farms; Daniel H. Beach, Union; D. B. Wade, Union; D. Hobart Sayre, Clerk and Registrar, Union.

Upper, Cape May County; population, 1,350. Members and Officers—Harry Young, President, Beesley's Point; Washington Van Gilder, Petersburg; Zachariah Townsend, Tuckahoe; Jesse T. Young, Clerk, Beesley's Point; W. Shaw, Registrar, Tuckahoe; Randolph Marshall, Inspector, Tuckahoe.

Upper Freehold, Monmouth County; population, 2,002. Members and Officers—Isaac S. Dawes, President, Imlaystown; John W. Havens, Cream Ridge; Joseph Johnston, Allentown; F. C. Price, M.D., Clerk, Imlaystown; Wm. Quicksell, Registrar, Hornerstown.

Upper Penn's Neck, Salem County; population, 793. Members and Officers—Jos. E. Clark, President, Pennsgrove; Wilbert L. Sailor, Pennsgrove; Jos. Lloyd, Pennsgrove; J. Ford Thompson, Clerk, Pennsgrove.

Upper Pittsgrove, Salem County; population, 1,722. Members and Officers—R. MacFarland, President, Monroeville; Wm. Mayhew, Elmer; John Hitchner, Daretown; Geo. W. Fitch, M.D., Daretown; R. A. Robinson, Clerk and Registrar, Monroeville.

\*Vernon, Sussex County; population, 1,649. Members and Officers—A. P. Shaw, Secretary and Registrar, Vernon.

\*Verona, Essex County; population, 2,576. Members and Officers—H. B. Whitehorne, M.D., Secretary, Verona.

Voorhees, Camden County; population, 1,009. Members and Officers—Edw. C. Gardner, President, Kirkwood; Chas. H. Hammel, Marlton; Geo. Riggins, Gibbsboro; W. A. Wescott, M.D., Berlin; S. H. Gardiner, Clerk and Registrar, Ashland.

Wall, Monmouth County; population, 3,518. Members and Officers—Geo. C. C. Wilson, President, Belmar; Edgar C. White, Belmar; S. B. Pearce, Brielle; Geo. E. Rogers, Clerk, Registrar and Inspector, Belmar.

Wallpack, Sussex County; population, 325. Members and Officers—Nicholas Tillman, President, Wallpack Centre; Samuel Cole, Wallpack Centre; Daniel S. Smith, J. W. Bunnell, Assessor, Bevans.

Wantage, Sussex County; population, 2,080. Members and Officers—J. C. House, President, Sussex; I. Brink, Sussex; W. T. Wright, Sussex; F. Coe, Sussex; S. M. Parcell, Clerk, Sussex; H. G. Vangesbeck, M.D., Inspector, Sussex.

Warren, Somerset County; population, 974. Members and Officers—John Gunten, President, Warrenville; Henry Williams, Warrenville; Frank Alletta, Warrenville; Edmund E. Sage, Clerk and Registrar, Plainfield, R. F. D. No. 3.

Washington, Bergen County; population, 382. Members and Officers—August Ramish, President, Westwood; Wm. Derrickson, Wm. G. Kopping, Lucas C. Blauvelt, Clerk and Registrar, Westwood.

Washington, Burlington County; population, 568. Members and Officers—Albert Sooy, President, Greenbank; J. M. Birchall, Greenbank; Thos. K. Sooy, Greenbank; J. R. Koster, Clerk and Registrar, Greenbank. Washington, Gloucester County; population, 1,336. Members and Officers.

<sup>\*</sup> No report received.

cers—B. Frank Allen, President, Sewell; Harry Evans, Sewell; G. R. Hurff, Turnersville; J. E. Hurff, M.D., Blackwood; C. D. Nicholson, Clerk and Registrar, Turnersville.

\*Washington, Mercer County; population, 1,173. Members and Officers—E. K. Cole, President and Clerk, Windsor.

Washington, Morris County; population, 2,021. Members and Officers—John A. Parker, President, Schooley's Mountain; Fred. Apgar, Parker; Ed. Sutton, M.D., German Valley; G. H. Sliker, Clerk and Registrar, Pleasant Grove; Mahlon Van Nest, Inspector, German Valley.

Washington, Warren County; population, 1,089. Members and Officers—William Garrison, President, Washington; Oren Perry, Washington; Charles B. Smith, M.D., Washington; Wm. H. Apgar, Port Colden; Samuel Rhinehart, Clerk and Assessor, Washington.

\*Waterford, Camden County; population, 2,713. Members and Officers—C. D. Heath, President and Registrar, Berlin.

Wayne, Passaic County; population, 2,017. Members and Officers—Geo. W. Colfax, President, Pompton; John Berder, Mountain View; Wm. H. Birchenough, Paterson; H. M. Berdan, Clerk, Paterson, R. F. D. No. 1; Thos. D. Ryerson, Registrar, Wayne.

Weehawken, Hudson County; population, 8,027. Members and Officers—Francis M. McCauley, President, Weehawken; Louis Anderson, Weehawken; Joseph Bessonnett, Weehawken; George McDonald, Weehawken; Fred. Rubart, Weehawken; Silas Platner, Weehawken; John M. Hannan, Weehawken; F. B. Stillwagon, M.D., Inspector, Weehawken; Emile W. Graunt, Clerk, Weehawken; John Haydock, Assistant Inspector, Weehawken.

Westampton, Burlington County; population, 542. Members and Officers—Firman Dubell, President, Mount Holly; Clarence Loveland, Mount Holly; Wm. H. Austin, Mount Holly; Hudson B. Haines, Clerk, Mount Holly; Elmer D. Prickett, M.D., Inspector, Mount Holly.

West Amwell, Hunterdon County; population, 858. Members and Officers—Charles A. Slack, President, Lambertville; Charles E. Holcombe, Mount Airy; William J. Cane, Lambertville; George H. Carr, Clerk, Lambertville; Frank W. Larrison, M.D., Inspector, Lambertville.

West Deptford, Gloucester County; population, 2,227. Members and Officers—Wm. R. Gibbs, President, Thorofare; R. M. Plum, Thorofare; Joseph Moore, Woodbury; James Hunter, Westville; James Carter, Clerk and Registrar, Thorofare.

West Milford, Passaic County; population, 2,002. Members and Officers—C. La Roe, President, Newfoundland; Wm. W. Eckhart, Newfoundland; D. E. Drake, M.D., Newfoundland; S. E. Colter, Echo Lake; E. T. La Roe, Clerk, Newfoundland.

\*West Windsor, Mercer County; population, 1,320. Members and Officers—C. W. Hutchinson, Registrar, Dutch Neck.

Weymouth, Atlantic County; population, 900. Members and Officers—Anderson Campbell, President, Tuckahoe; Thos. Bailey, Tuckahoe; R. P. Sheppard, Tuckahoe; F. R. McKeague, Registrar, Tuckahoe; R. Marshall, M.D., Inspector, Tuckahoe.

\*Willingboro, Burlington County; population, 658. Members and Officers—Jerome Wills, Secretary and Registrar, Burlington.

\*Winslow, Camden County; population, 2,856. Members and Officers—Michael G. Burdsall, Clerk, Tansboro.

<sup>\*</sup> No report received.

#### 112 REPORT OF THE BOARD OF HEALTH.

Woodbridge, Middlesex County; population, 10,221. Members and Officers—Peter K. Edgar, President and Registrar, Woodbridge; John S. Dooley, Woodbridge; Howard Pender, Woodbridge; Charles S. Farrell, Woodbridge; Randolph Lee, Woodbridge; Anton Kuhlman, Clerk, Port Reading; R. A. Hirner, Inspector, Woodbridge.

Woodland, Burlington County; population, 413. Members and Officers—Victor Ritzendollar, President, Chatsworth; Elmer C. Dunfee, Chatsworth; Charles H. Grant, Chatsworth; W. J. Buzby, Clerk, Chatsworth; Andrew Bozarth, Registrar, Chatsworth.

\*Woolwich, Gloucester County; population, 1,138. Members and Officers—W. G. Simmons, M.D., Secretary and Inspector, Swedesboro.

<sup>\*</sup> No report received.

## List of Registrars of Vital Statistics.

#### CITIES.

NAME OF PLACE.	NAME OF REGISTRAR.	Address.
Asbury Park	Budd H. Obert	Asbury Park,
Atlantic City	Alfred T. Glenn	Atlantic City.
Bayonne	C. J. Rooney	Jersey City.
Belvidere	U. G. Pursell	Belvidere.
Beverly	W. S. Fenimore	Beverly.
Bordentown	H. W. Kunzi	Bordentown.
Bridgeton	Frank L. Hewitt	Bridgeton.
Burlington	Thos. S. Mooney	Burlington,
Camden	I. V. Bradley	Camden.
Саре Мау	John W. Thompson	Саре Мау.
Dover	J. H. C. Hunter	Dover.
East_Orange	Edgar Williams	East Orange.
Egg Harbor	V. P. Hoffmann	Egg Harbor.
Elizabeth	John F. Kenah	Elizabeth.
Englewood	Robert Jamieson	Englewood.
Gloucester City	George C. Wynkoop	Gloucester City.
Hackensack	Wm. P. Ellery	Hackensack.
Hoboken	Joseph Tucker	Hoboken.
Jersey City	Thos. H. Giblin	Jersey City.
ambertville	James H. Reynolds	Lambertville.
Long Branch	E. B. Blaisdell	Long Branch.
Millville	L. H. Hogate	Millville.
Montclair	Chester H. Wells	Montclair.
Morristown	David H. Wilday	Morristown.
Newark	James F. Connelly	Newark.
New Brunswick	Willett B. Gano	New Brunswick:
Orange	George F. Grear	Orange.
Paterson	Charles S. Gall	Passaic. Paterson.
Perth Amboy	Chas. M. MacWilliams	Perth Amboy,
Phillipsburg	Frank Kneedler	Phillipsburg.
Plainfield	H. O. Mattison	Plainfield.
Rahway	Charles H. Lambert	Rahway.
Salem	Clinton Bowen	Salem.
Summit	Dr. J. E. Rowe	Summit.
Crenton	Harry B. Salter	Trenton.
Woodbury	J. E. Estell	Woodbury.

#### BOROUGHS.

NAME OF PLACE.	NAME OF REGISTRAR.	ADDRESS.
Allendale	J. M. Christopher Wm. H. Conover W. R. Forsythe L. H. Tavernier S. H. Wilson W. E. Young	Alpine.
•	8	(113)

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#### BOROUGHS-Continued.

NAME OF PLACE.	NAME OF REGISTRAR.	ADDRESS.
Atlantic Highlands	Thos. H. Leonard	Atlantic Highlands.
Audubon	Howard Callingham	Audubon.
Avalon	Charles B. Kates	Avalon.
Avon	H. M. Dolan	Avon-by-the-Sea.
Barnegat City Bay Head	James V. Jones	Barnegat City. Bay Head.
Beach Haven	Thomas A. Gavin	Beach Haven.
Belmar	Thomas A. Gavin	Belmar.
Bergenfield	John J. Huyler Harlan P. Ross Charles McNabb	Alpine.
Bogota	Harlan P. Ross	Bogota.
Bound Brook	Charles McNabb	Bound Brook.
Bradley Beach	C. F. Burney C. A. Canfield J. A. Price Allen Looker, Jr. J. J. Van Orden	Bradley Beach. Branchville.
Branchville Brigantine	J A. Price	Brigantine.
Butler	Allen Looker. Jr	Butler.
Caldwell	J. J. Van Orden	Caldwell.
Cape May Point Carlstadt Chatham	14. Miller	Cape May Point.
Carlstadt	Herman Foth	Carlstadt.
Chatham	D. H. Crawford	Chatham.
Chesilhurst	J. T. Humphries	Chesilhurst. Clayton.
Clayton Cliffside Park	J. T. Humphries C. F. Fisier, M.D. Jean H. Raas George A. Hall Alfred Anderson H. B. Fernest	Cliffside.
Clinton	George A. Hall	Clinton.
Closter	Alfred Anderson	Closter.
Collingswood Cresskill	H. B. Earnest	Collingswood.
Cresskill	H. B. Earnest George Y. Allaire H. D. Harris H. A. Bingham	Cresskill.
Deal	H. D. Harris	Deal.
Delford	William Begg	Oradell. Demarest.
Dumont	E. S. Clarke	Dumont.
Dunellen	E. S. Clarke Charles A. Coriell	Dunellen.
East Newark	C I Rooney	Jersev City.
East Rutherford	C. R. Wheatley John R. Towle	East Rutherford.
Edgewater	John R. Towle Hiram Van Meter John G. Ropes E. T. Reid T. Byrne Ivy H. I. Angell John C. Bush Samuel W. McAneny Frank P. Van Note George W. Carman Henry W. Young John C. Eby Robert H. Morrow Wm. R. Shurts	Edgewater.
Elmer Englewood Cliffs	John G Rones	Elmer. Coytesville.
Englishtown	E. T. Reid	Englishtown.
Essex Fells	T. Byrne Ivy	Essex Fells.
Etna	H. I. Angell	Etna.
Fairview Fanwood	John C. Bush	Fairview.
Fanwood Farmingdale	Erank D. Van Note	Fanwood.
Fieldsboro	George W. Carman	Farmingdale. Fieldsboro.
Florham Park	Henry W. Young	Florham Park.
Folsom	John C. Eby	Folsom.
Fort Lee	Robert H. Morrow	Coytesville.
Frenchtown ,	Wm. R. Shurts : L. H. Heinzman	Frenchtown.
Garfield	L. H. Heinzman C. D. Costleigh Clarence Place J. B. Christopher Wm. H. Harrison Wm. H. Key C. G. Eckerson W. F. De Voy Henry F. Copeland W. E. Thompson Edward M. Clemons	Garfield.
Garwood	Clarence Place	Garwood. Glen Ridge,
Glen Rock	J. B. Christopher	Ridgewood.
Glen Rock Haddonfield	Wm. H. Harrison	Haddonfield.
Haddon Heights Harrington Park Hasbrouck Heights	Wm. H. Key	Haddon Heights.
Harrington Park	C. G. Eckerson	Harrington Park. Hasbrouck Heights.
Hasbrouck Heights	W. F. De Voy	Hasbrouck Heights.
Haworth	W F Thompson	Haworth. Hawthorne.
Helmetta	Edward M. Clemons	Helmetta.
High Bridge	P. H. Murray	High Bridge.
Highlands	S. Liming	Highlands.
Highland Park	F. A. Metzrath	New Brunswick.
Hightstown	Frank V. Jemison	Hightstown.
Holly Beach	Theo A K Gossley	Holly Beach.
Hopatcong	r. A. Metzrath Frank V. Jemison Forrest B. Long Theo. A. K. Gessler Robert Zulauf Frank Simpson F. B. Hiddle	Landing. Hopewell.
Island Heights	Frank Simpson	Island Heights.
Junction Lavalette	E. E. Riddle	Junction.
Lavalette	E. E. Riddle A. G. Fischer H. M. Thompson	Lavalette.
Leonia	H. M. Thompson	Leonia.
Linden Linwood	Jos. B. McDonagh  James Farish	Linden.
Little Ferry	Louis Braner	Linwood.
Little Ferry	Louis Brauer	Little Ferry.

## LIST OF REGISTRARS OF VITAL STATISTICS. 115

#### BOROUGHS—Continued.

NAME OF PLACE.	NAME OF REGISTRAR.	ADDRESS.
Lodi	Jacob Van Hook	Lodi.
Longport	E. F. Cook	Longport. Madison.
Madison	E. F. Cook Chas. E. Cook Robert M. Marks	
Manasquan	Robert M. Marks	Manasquan.
Matawan	Wm. A. Rodgers G. M. Fetzer Wm. B. Stewart	Matawan.
Maywood	G. M. Fetzer	Maywood.
Merchantville	Wm. B. Stewart	Merchantville.
Metuchen	Dr. A. L. Ellis	Metuchen. Midland Park.
Midland Park	Thomas Holt	Millstone.
Millstone	Robert A. Harkins	Milltown.
Montvale	John B. Hering	Montvale.
Mount Arlington	John B. Hering	Mt. Arlington.
Mountainaide	J. O'Conners	Mountainside.
Mount Tabor	l	
National Park	Wm. P. Abdili S. H. Hendricks Charles W. Eaton	National Park.
Neptune City	S. H. Hendricks	Asbury Park.
Netcong	Charles W. Eaton	Netcong.
New Providence	Wm. Woodruff	New Providence.
North Caldwell	Wm. Woodruff Fred. L. Baldwin E. C. Duberson	Caldwell.
Northfield City	E. C. Duberson	Bakersville.
North Haledon	Samuel Clowes	Haledon.
North Haledon North Plainfield North Spring Lake.	Dr. A. H. Dundon F. M. Hunt	Plainfield.
North Spring Lake	Poul Tuebleet	Spring Lake Beach. West Norwood.
Norwood	Paul Luebkert Henry M. Whitfield W. B. Romaine Emil C. Hessert	West Norwood.
Nutley	W B Pomeine	Nutley. Oakland.
Oakland	Emil C Hassart	Oaklyn.
Oaklyn Ocean City	T. Lee Adams	Ocean City.
Ocean Grove		occan city.
Old Tappan	R. B. Haring	Tappan, N. Y.
Orvil	Francis C. Kopp	Hohokus.
Palisades Park	S. Wells	Palisades Park.
Park Ridge	J. G. Forbes	Park Ridge.
Paulsboro	Jacob Ballinger J. J. Brander	Paulsboro.
Pemberton	J. J. Brander	Pemberton.
Pennington	Joseph C. Bunn Dr. C. P. Lummis Dr. C. B. Phillips	Pennington.
remisgrove	Dr. C. P. Lummis	Pennsgrove.
Pitman Grove	Wilhum Bood	Pitman Grove. Pleasantville.
Pleasantville Point Pleasant	Wilbur Reed	Point Pleasant.
Pompton Lakes	H I. Walle	Pompton Lakes.
Port Republic City	H. L. Wells	Port Republic.
Princeton	Walter Howe	Princeton.
Princeton Prospect Park	Jacob Doele	Paterson.
Karitan	Geo. H. Brightbill	Raritan.
Ridgefield	B. F. Underwood, M.D	Ridgefield.
Riverside	J. H. Weston	Cherry Hill.
Riverton	Jacob G. Cottrell	Riverton.
Rockaway Rocky Hill	Wm. A. Parliman A. C. Skirm C. C. Sheridan	Rockaway.
Rocky Hill	A. C. Skirm	Rocky Hill.
Roosevelt	C. C. Sheridan	Carteret.
Roselle	G. A. Rawlins Fred. Nichols	Roselle.
Rutherford	Geo. W. Lawton	Roselle Park. Rutherford.
Saddle River	James I. Ackarman	Saddle River.
loohright '	James L. Ackerman	Seabright.
Sea Isle City	W. H. Hambleton	Sea Isle City.
Seaside Park	Dr. J. B. Wood	Seaside Park.
чесянсня	W. H. Hambleton Dr. J. B. Wood C. J. Rooney James E. Scull	Seaside Park. Jersey City.
lomore Point	James E. Scull	Somers Point.
South Amboy	F. E. De Graw	South Amboy.
South Amboy South Atlantic City. South Cape May	Charles Hart	South Amboy. South Atlantic City.
South Cape May	**************************************	
	J. C. Bowne	South River.
pring Lake Beach.	A S Van Aradala	Spring Lake Beach.
Stanhope	A. S. van Arsdaie	Stanhope.
Stockton	J. C. Rowne D. H. Hills A. S. Van Arsdale P. E. Rockafellow Chas, E. Willson	Stockton. Sussex.
LIBOUA	Chas. E. Willson Wm. H. Rieger J. B. W. Lansing, M.D.	
wedesboro		Swedesboro.

## 116 REPORT OF THE BOARD OF HEALTH.

#### BOROUGHS-Continued.

NAME OF PLACE.	NAME OF REGISTRAR.	ADDRESS.
Totowa	Wilbur De Mott	Paterson, R. F. D., No. 1.
Tuckerton	T. Wilmer Speck*	Tuckerton.
Upper Saddle River.	A. A. Zabriskie	Saddle River.
Ventnor City	William Kuhl	Atlantic City.
Vineland	Dr. C. M. Gray	Vineland.
Wallington	James Brennan	Wallington.
Washington	A. J. Craft	Washington.
Wenonah	Jesse W. English	Wenonah.
West Caldwell	C. C. Francisco	Caldwell.
West Cape May	Theo. W. Reeves	Eldredge.
Westwood	N. Cleveland	Westwood.
Wharton	Wm. H. Force	Wharton.
Wildwood	C. G. Eldredge	Wildwood.
Woodbine	L. M. Danerhirst	Woodbine.
Woodcliff	G. J. Wortendyke	Woodcliff.
Wood Lynne	F. G. Muggleworth	Wood Lynne.
Wood Ridge	F. W. Lehmann	Wood Ridge.
Woodstown	H. H. Stepler	Woodstown.

#### TOWNS.

NAME OF PLACE.	NAME OF REGISTRAR.	ADDRESS.
Absecon	Samuel Johnson	Absecon.
Boonton	Wm. L. Johnson W. R. Bailey	Bloomfield. Boonton.
Freehold	Alonzo Brower	Freehold.
Guttenberg Hackettstown	C. J. Rooney	Jersey City.
Hammonton	A. G. Boettiger	Hackettstown. Hammonton.
Harrison	C. J. Rooney	Jersey City.
Irvington	Mahlon Stockman	Irvington.
Keyport	Nevin Kennedy, Sr	Kearny.
Red Bank	Dr. B. H. Garrison	Red Bank.
Somerville	W. R. Sutphen	Somerville.
Westfield	C. J. Rooney	Jersey City. Westfield.
West Hoboken	C. J. Rooney	Jersey City.
West New York West Orange	C. J. Rooney	Jersey City. West Orange.

#### VILLAGES.

NAME OF PLACE.	NAME OF REGISTRAR.	Address.
Ridgefield Park Ridgewood South Orange	C. A. Knox J. B. Hopper Dr. A. C. Benedict	Ridgefield Park. Ridgewood. South Orange.

## LIST OF REGISTRARS OF VITAL STATISTICS. 117

#### TOWNSHIPS.

NAME OF PLACE.	NAME OF REGISTRAR.	ADDRESS.
Acquackanonk	Richard Berry John C. Wilson Geo. A. Jilson Wm. E. Simpkins William Hiff Frank E. Heyer	Clifton.
Alovandria	John C. Wilson	Everittstown.
Allamuchy Alloway Andover Atlantic	Geo. A. Jilson	Allamuchy.
Alloway	Wm. E. Simpkins	Elmer.
Andover	William Iliff	Lafayette.
Atlantic	Frank E. Hever	Colt's Neck.
Bass River		New Gretna.
Bedminster	W. D. Vanderbeek	Gladstone.
Belleville	H. W. Underwood	Belleville.
Berkley	Devine Butler S. S. Baldwin G. C. Lott	Parvilla
Bernards	S. S. Baldwin	Liberty Corner.
Rethlehem	G. C. Lott	1 Norton.
Beverly	Jos. B. Carter	Delanco. Walnut Valley.
Beverly Blairstown	Jos A. Dugan	Walnut Valley.
Boonton	Jos. Stevenson	Boonton.
Bordentown	Dr. Hugh Le Jambre	Bordentown.
Branchburg	A. McCullough	North Branch Depo
Brick	J. H. Harvey	North Branch Depo West. Pt. Pleasant.
Bridgewater	B. T. Conkling	Somerville.
Bridgewater Buena Vista	Alfred Pennock, Sr	Vineland.
Burlington	Thos. B. Gandy	Burlington.
Byram	G. C. Lott Jos. B. Carter Jos A. Dugan Jos. Stevenson Dr. Hugh Le Jambre A. McCullough J. H. Harvey B. T. Conkling Alfred Pennock, Sr. Thos. B. Gandy Samue! McMickle Theo. Vincent John H. Jackson	Sparta.
Caldwell	Theo. Vincent	Caldwell.
Centre		· Magnolia.
Chatham	J. H. Bebout	New Providence.
Chester (Bur.)	George W. Heaton	Moorestown.
Chester (Bur.) Chester (Mor.) Chesterfield	Abram Tiger	Chester.
Chesterfield	Wm. Wallace	Crosswicks.
Cinnaminson	Thos. E. Steele	Palmyra.
Clark	Wm. J. Thompson	Rahway.
Clementon	George W. Evans	Lindenwold.
Clinton	Bergen B. Berkaw	Annandale.
Commercial	Walter C. Riggin	Port Norris.
Cranbury	J. H. Bebout George W. Heaton Abram Tiger Wm. Wallace Thos. E. Steele Wm. J. Thompson George W. Evans Bergen B. Berkaw Walter C. Riggin A. M. Davison F. W. Swackhamer	Cranbury.
Crantora	F. W. Swackhamer E. R. Parvin William Graff	Cranford.
Deerneid	E. R. Parvin	Deerfield Street.
Delaware (Cam.)	David L. Holcombe	Haddonfield.
Delaware (Hull.)	Cooper Wrider	Lambertville. Riverside.
Deerfield	David L. Holcombe George Friday I. S. Townsend C. C. Headley Thomas B. Irons S. Campbell E. F. Cramer Chas. F. Holzbauer Edgar Higgins Henry Warnsdorfer J. C. Dawson	Clermont.
Dontford	C C Hoodley	Westville.
Dover	Thomas B Irons	Tom's River.
Ποπηρ	S Campbell	Newport.
Eaglegwood	E F Cramer	West Creek.
Eagleswood Eastampton East Amwell	Chas F Holzbauer	Smithville.
East Amwell	Edgar Higgins	Ringoes.
East Brunswick	Henry Warnsdorfer	New Brunswick.
East Greenwich	J. C. Dawson	Mickleton.
East Windsor	8. L. Mount	Etra.
Estontown	Douglas Riddle	Oceanport.
Egg Harbor	George S. Winner	Scullville.
Egg Harbor	Samuel L. Seran	Aura.
Elsinboro	Charles P. Farnkopf	Salem.
Elsinboro Evesham	Wm. F. Powell	Marlton.
Ewing	Wm. H. Cadwallader	Trenton.
Fairfield Fanwood	James B. Mulford	Fairton.
Fanwood	Geo. H. Johnston	Scotch Plains.
	Byron Carty	Florence.
Frankford	Daniel Dalrymple	Papakating.
Franklin (Ber.)	Daniel Snyder	Midland Park.
Franklin (Glo.)	Douglas Riddle George S. Winner Samuel L. Seran Charles P. Farnkopf Wm. F. Powell Wm. H. Cadwallader James B. Mulford Geo. H. Johnston Byron Carty Daniel Dalrymple Daniel Snyder H. C. Richman Elwood Nixon	Malaga.
Franklin (Hun.)	Elwood Nixon	Quakertown.
Frankford Franklin (Ber.) Franklin (Glo.) Franklin (Hun.) Franklin (Som.) Franklin (War.)	A. Hummer	East Millstone.
Franklin (War.)	P. B. Butterwick	Asbury.
Fredon	Joseph E. Huff	Newton.
Freehold	R. V. Lawrence	Freehold.
Frelinghuysen	W. H. Ackerson	Blairstown.
Galloway	J. E. Smith	Oceanville.
Freilinghuysen Galloway Glassboro Gloucester	A. Hummer P. B. Butterwick Joseph E. Huff R. V. Lawrence W. H. Ackerson J. E. Smith J. T. Abbott Martin Schubert Irving L. Labar	Glassboro.
Gloucester	Martin_Schubert	Kirkwood.
Green		<sup>1</sup> Tranquility.

#### TOWNSHIPS—Continued.

NAME OF PLACE.	NAME OF REGISTRAR.	ADDRESS.
reenwich (Cum.)	J. W. Butler	Othello.
reenwich (Glo.)	Jacob M. Allen	Gibbstown.
reenwich (Cum.) reenwich (Glo.) reenwich (War.)	Wm Sherrer	Bloomsbury.
laddon	James S. Williams	Westmont.
[amilton (Atl.) [amilton (Mer.)	Harry Jenkins	Mays Landing.
lamilton (Mer.)	J. T. Allinson	Yardville.
lampton	John W. Thompson	Blair.
anover	Marcua C Hill	Whippany. Blairstown.
lanover	James S. Williams Harry Jeukins J. T. Allinson John W. Thompson Edwin C. Quinby Marcus C. Hill Smith Simpson	Hamburg.
armony	rreeman schulet	Rocksburg.
[arrington	Emil Kober	Closter.
arrison	Eli Heritage	Richwood.
[illsboro	J. H. Saums John W. Kinmouth	Somerville.
lilisdale	John W. Kinmouth	Hillsdale. Ramsey.
olland	H R Vangyekel	Milford.
(olmdel	V. D. Kenney	Holmdel.
ope	L. C. Fleming	Townsbury.
ope	Walter L. Minch	Shiloh.
opewell (Mer.)	Charles_HHart	Titusville.
lowell	James H. Butcher	Ardena.
ndependence	John W. Kinmouth D. S. Wanamaker H. B. Vansyckel V. D. Kenney L. C. Fleming Walter L. Minch Charles H. Hart James H. Butcher W. K. Teel W. S. Hendrickson	Vienna.
acksonefferson		Jackson's Mills. Woodport.
ingwood	Charles Chamberlain Samuel J. Snyder Milton De Witt	Flemington.
nowiton	Milton De Witt	Columbia.
acev	B. F. Matthews J. C. Strader, M.D. R. B. Robbins	Forked River.
afayetteakewood	J. C. Strader, M.D.	Lafayette.
arewood	Honey Toylor	Lakewood. Vineland.
andis	Furman B. Shennard	Cedarville.
awrence (Mer.)	Frank Pierson	Lawrenceville.
enamon	Henry Taylor Furman B. Sheppard Frank Plerson E. R. Waters	Glen Gardner.
indenittle Egg Harbor ittle Falls	Frank B. Stimson	Linden.
ittle Egg Harbor	W. W. Wilson	Tuckerton. Little Falls.
ivingston	George E. De Camp Julius Pries	Roseland.
odi	Julius Pries	Wood Ridge.
odiogan	8. B. Platt	Bridgeport.
ong Beach	S. B. Platt A. H. T. Rider E. F. Kline J. P. Mackissic Edward Hancock	Beach Haven.
opatcong	E. F. Kilne	Shimers.
ower	Edward Hancock	Cape May, Hancock's Bridge.
ower Penn's Neck.	E. L. Irelan	Pennsville.
umberton	E. L. Irelan H. D. Culin D. H. Brown	Mount Holly.
adison	D. H. Brown	Browntown.
analapan anchester (Ocean). anchester (Pas.)	Samuel C. Bowne	Tennent.
anchester (Ucean).	Amos Bozarth	Lakehurst. Haledon.
annington	G. V. Spangenmacher	Salem.
ansfield (Bur.) ansfield (War	Jos. H. Armstrong	Columbus.
ansfield (War	J. P. Frome Wm. S. Hurff	Oxford.
antua	Wm. S. Hurff	Sewell.
arlboro	W. C. McElwaine	Englishtown.
atawan	Richard Heuser	Matawan. Leesburg.
aurice River	Wm. M. Potts	Medford.
endham	Henry Reeves, Jr. Wm. M. Potts F. H. Garrabrant	Brookside.
iddle	Joseph Camp Omar Sickles	Pierces.
iddletown	Omar Sickles	Navesink.
idland	John D. Bogert	Ridgewood.
illburn	George T Fly	Miliburn.
illstone	John W. McClure	Cranbury. Williamstown.
onroe (Glo.) onroe (Mid.)	R. R. Vandenbergh	Prospect Plains.
ontague	George McCarty	Port Jervis, N. Y.
ontgomeryontville	John D. Bogert John M. Drake George J. Ely John W. McClure R. R. Vandenbergh George McCarty C. B. Allhouse A. W. Berger Thos. T. Sands Benj. M. Haines	Port Jervis, N. Y. Belle Mead. Pine Brook.
ontville	A. W. Berger	Pine Brook.
orris		Morristown.

## LIST OF REGISTRARS OF VITAL STATISTICS. 119

#### TOWNSHIPS—Continued.

NAME OF PLACE.	NAME OF REGISTRAR.	ADDRESS.
Mount Olive	S. W. Salmon	Mount Olive.
Mullica	J. R. Abbott	Nesco.
Veptune	Wm. R. O'Brien	Asbury Park.
New Hanover New Providence	Charles Remine	Wrightstown.
New Providence	P. G. Johnson P. H. Van Horn M. H. Girvin	New Providence.
Jaurton	P. H. Van Horn	Newton.
Northampton North Bergen North Brunswick North Hanover North Plainfield	M. H. Girvin	Mount Holly.
North Bergen	C. J. Rooney	Jersey City. New Brunswick.
North Brunswick	I. V. Williamson	New Brunswick.
North Hanover	Pearson Taylor A. P. Voorhies Harry G. Van Note Oscar D. Brown Edwin E. Somers	Wrightstown.
Ocean (Mon.)	Hanny C. Van Note	Plainfield. Oakhurst.
cean (Ocean)	Ogear D. Brown	Waretown.
oldmans	Edwin E Somers	Pedricktown.
rvil	Charles Pfitzer	Waldwick.
verpeck	Wm H Hunter	Ridgefield Park.
xford	Wm. H. Hunter Michael_Mountain	Oxford.
ahaquarry	Hiram Zimmerman	Millbrook.
alisade	William Ely F. Blackburn	New Bridge.
almyra	F. Blackburn	Palmyra.
assaic	J. A. Harvey	Stirling.
emberton	Barclay Seeds	Pemberton.
ensauken	Harry E. Horner	Merchantville.
equannock	Alfred Gilland	Pompton Plains.
ilesgrove	F. Blackburn J. A. Harvey Barclay Seeds Harry E. Horner Alfred Gilland David F. Davis Geo. W. Corlell George Shallck George Harksborne	Woodstown.
Piscataway	Geo. W. Coriell	New Market.
ittsgrove	George Shalick	Centreton.
lumsted	George Hartshorne Harry E. Boyer David Beam	New Egypt.
ohatcong	Harry E. Boyer	Springtown.
ompton	Charles D. Calleb	Midvale.
rinceton	Charles P. Gulick	Kingston.
uinton	Chas. S. Bassett	Quinton.
eriten (Unn )	Wm & Ruchenan	Dover.
taritan (Hun.) taritan (Mid.) taritan (Mon.)	Chas. S. Bassett I. G. Bryant Wm. S. Buchanan Wm. T. Woerner W. C. Smith John W. Opie Thos. F. Mailon Charles Helss	Flemington. New Brunswick.
erlten (Mon.)	W. C. Smith	Keyport.
eadington	John W. Opie	Three Bridges.
idgefield	Thos. F. Mallon	Coytesville.
iverside	Charles Heiss	Riverside.
ivervale lockaway	C. H. De Voe Thomas Grant E. W. Kilpatrick Isaac A. Hopper W. H. Van Sickle	Rivervale.
lockaway	Thomas Grant	Hibernia.
OTHITT	E. W. Kilpatrick	Kenvil.
addle River andyston	Isaac A. Hopper	Fair Lawn.
andyston	W. H. Van Sickie	Bevans.
ayreville	Thos. Creamer Mahlon Prickitt	Parlin.
hamonghrewsbury	Albort T Tring	Indian Mills.
outhampton	Albert L. Ivins	Red Bank.
outh Brunswick	Wm Porking	Vincentown. Princeton.
outh Harrison	Wm. Perkins D. C. Lippincott	Harrisonville.
outh Orange	Thos. C. Baker John W. Maseker John B. Tilton Lewis T. Terry John B. Courtney Obadiah Van Horn B. M. Bonham	Maplewood.
	John W. Maseker	Snarta
pringfield (Bur.)	John B. Tilton	Sparta. Wrightstown.
parta	Lewis T. Terry	Springfield.
tamord	John B. Courtney	Manahawkin.
tillwater	Obadiah Van Horn	Stillwater.
tow Creek	B. M. Bonham	Roadstown.
abernacle	George H. Wisham	Vincentown.
eaneck	W. L. Middlemas	Teaneck.
ewksbury	George H. Wisham W. L. Middlemas Hezeklah Philhower Thos. F. Buckley Morris Stockton E. R. Wills D. H. Sawyo	Califon.
nion (Ber.) nion (Hun.) nion (Ocean)	Thos. F. Buckley	Lyndhurst.
nion (Hun.)	Morris Stockton	Pattenburg.
nion (Ocean)	D. H. Wills	Barnegat.
nion (Union)	D. 11. Bayle	Union.
pper	R. F. Smith	Marmora.
pper Penn's Neck	Wm. Quicksill George W. Hewitt	Hornerstown.
pper Pittsgrove	R. A. Robinson	Pennsgrove. Monroeville.
ernon	John Gunderson	Glenwood.
erona	C. S. Simonson S. H. Gardiner	Verona.

#### TOWNSHIPS-Continued.

NAME OF PLACE.	NAME OF REGISTRAR.	ADDRESS.
Wall	George E. Rogers	Belmar.
Wallpack	J. W. Bunnell	Bevans.
Wantage	S. M. Parceli	Sussex.
Warren	Edmund E. Sage	Gillette.
Washington (Ber.)	Lucas C. Blauvelt	Westwood.
Washington (Bur.)	J. R. Koster	Green Bank.
Washington (Glo.)	C. D. Nicholson	Turnersville.
Washington (Mer.).	C. N. Hutchinson	Robbinsville.
Washington (Mor.).	Geo. H. Sliker	Pleasant Grove.
Washington (War.).	Samuel Rinehart	Washington.
Waterford	Charles D. Heath	Berlin.
Wayne	Thos. D. Ryerson	Wayne.
Weehawken	C. J. Rooney	Jersey City.
Westampton	Hudson B. Haines	Mount Holly.
West Amwell	George H. Carr	Lambertville.
West Deptford	James Carter	Thorofare.
West Milford •	Edward T. La Roe	Newfoundland.
West Windsor	C. W. Hutchinson	Dutch Neck.
Weymouth	F. R. McKeague	Tuckahoe.
Willingboro	W. W. Vansciver	Beverly.
Winslow	Joseph Graham	Cedar Brook.
Woodbridge	Peter K. Edgar	Woodbridge.
Woodland	Andrew Bozarth	Chatsworth.
Woolwich	H. C. Howey	Swedesboro.

## List of Coroners in New Jersey.

Atlantic County-George Scuft, Edmund C. Gaskill, Jr., William J. Dubler.

Bergen County-Cornelius Collins.

Burlington County-Barclay Seeds, Joshua D. Janney.

Camden County-Joel W. Fithian, William H. Thompson.

Cape May County-Nathan A. Cohen.

Cumberland County-Johnson Hitchner, John S. Halsey.

Essex County-Charles A. Keyler, Elmer G. Wherry, Lewis L. Davidson.

Gloucester County-Allen B. Black, James Hunter, Jr.

Hudson County-Chauncy V. Bonnell, Robert Schlemm, James McLaughan.

Hunterdon County-Eugene Hoffman, John D. Stockton.

Mercer County—George B. Hulit, John R. D. Bower, Edmund R. Nutt.

Middlesex County-Harry O. Bishop, Charles R. Moke, Jesse H. Beekman.

Monmouth County-John R. Gravatt, William E. McDonald, John T. Tetley.

Morris County-William M. Decker, A. B. Coultas, George Hitchens.

Ocean County-George E. Bennett, J. H. Harvey.

Passaic County-William G. McClincey, Robert C. Moore.

Salem County-William M. Donnelly, A. B. Woodruff, J. D. Torton.

Somerset County-Fred. A. Wild.

Sussex County-Edwin W. Landis, Ephraim Morrison.

Union County-Jacob Hagin, Charles B. Lufburrow.

Warren County-Jesse Smith, John S. Stone, Edward W. Sharp.

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# List of County Physicians in New Jersey.

Atlantic County—L. R. Souder, M.D. Camden County—W. S. Jones, M.D. Cumberland County—E. L. Diament, M.D. Essex County—Daniel Elliott, M.D. Hudson County—Charles B. Converse, M.D. Mercer County—Frank G. Scammell, M.D. Middlesex County—J. L. Suydam, M.D. Passaic County—Andrew F. McBride, M.D. Salem County—Henry Jackson, M.D. Somerset County—W. H. Long, M.D. Union County—F. W. Westcott, M.D. Warren County—L. B. Hoagland, M.D.

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# List of Licensed Health Officers and Sanitary Inspectors.

Following is a list of the persons who have successfully passed the examinations provided for in the act approved April 8th, 1903:

#### Health Officers.

*Budd H. Obert	Asbury Park, N. J.
*Hiram Williams M.D	Passaic, N. J.
*Alex. Marcy, Jr., M.D	Riverton, N. J.
*Wm. S. Green, M.D	Paterson, N. J.
Walter Taylor, M.D	Jersey City, N. J.
Maria M. Vinton, M.D	East Orange, N. J.
Edward Guion, M.D	Atlantic City, N. J.
*Fred. W. Sell, M.D	Rahway, N. J.
Howard L. Baumgartner	Asbury Park, N. J.
Lewis L. Sharp, M.D	Palmyra, N. J.
*Ferdinand N. Sauer, M.D	Jersey City, N. J.
*George T. Tracy, M.D	Beverly, N. J.
*Chester H. Wells	Montclair, N. J.
*Duncan W. Blake, Jr., M.D	Gloucester City, N. J.
Samuel D. Mayhew, M.D	Bridgeton, N. J.
John O'Brien, Jr	Montclair, N. J.
*James A. Exton, M.D	Arlington, N. J.
Frank H. Streightoff	
*G. W. Fithian, M.D	Perth Amboy, N. J.
*Henry MacDonald	Newark, N. J.
*Leon R. Thurlow	
*Edward B. Rogers, M.D	Collingswood, N. J.
*J. I. Hoverder, M.D	Atco, N. J.
W. U. Kurtz, M.D	
John K. Adams, M.D	Orange, N. J.
William W. Brooke, M.D	Bayonne, N. J.
*Thomas J. Duffield	Asbury Park, N. J.
Henry D. Abbott, M.D	
*Eugene H. Sullivan	Orange, N. J.
*J. Alex. Browne, M.D	Paterson, N. J.
Perkins Boynton	Little Falls, N. J.
*Ellsmore Stites, M.D	
*Marcus W. Newcomb, M.D	
Charles P. Eaton	Jersey City, N. J.
	• • • • • • • • • • • • • • • • • • • •

<sup>\*</sup> In the service of the local board of health.

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## 126 REPORT OF THE BOARD OF HEALTH.

*V. M. D. Marcy, M.D.       Cape May,         *Milton L. Somers, M.D.       Atlantic City,         *Harry H. Pettit, M.D.       Ridgewood,         *John T. Connelly       Bayonne,         Charles J. Larkey       Bayonne,         *T. Lee Adams       Ocean City,         *R. H. Parsons, M.D.       Mount Holly,         Jay E. Kilpatrick       Montclair,         William Schluer       Orange,	N. J. N. J. N. J. N. J. N. J. N. J.
Plumbing Inspectors.	
*Henry B. Francis.         Camden,           Joseph Sonnenberg.         Irvington,           Conrad Deuchler.         Newark,           Charles M. Whelan         Trenton,           *William F. Brode.         Atlantic City,           *Thomas D. Clark         Woodbury,           Edward J. Kelly.         Jersey City,           Thomas F. Harris.         Orange,           *G. H. Soult         Ridgewood,           Henry A. W. Smith         Ocean City,           Hugh F. Parle.         Jersey City,           R. LeRoy Skillman         Newark,           Andrew McGookin, Jr.         Newark,	N. J. N. J. N. J. N. J. N. J. N. J. N. J. N. J. N. J.
Sanitary Inspectors of First Class.	
*Fred. W. Hering       Jersey City, 1         *George W. Gilmore       Newark, 1         *Fred. C. Robertson, M.D.       Jersey City, 1         *John T. McClure       Harrison, 1         *John G. Taylor       Dover, 1         Charles E. Bellows       Bridgeton, 1         *Albert E. Geissler       Kearny, 1         Thomas Ainge       Lansing, M.         Charles S. Voorhis       Palmyra, 1	N. J. Mich. N. J.
*Lewis E. Boutillier. Newark, I *Joseph C. Saile. Bloomfield, I *Casper Benz. Newark, I *Robert W. Meeker. Plainfield, I John K. Bennett, M.D. Gloucester City, I William H. Addis Plainfield, I William W. Heberton, M.D. South Orange, I Eric Ordell Newark, I John Graeves. Jersey City, I *John E. Rowe, D.V.S. Summit, I George N. Smith. Newark, I *Frank Dencklan. Plainfield, I J. H. C. Hunter. Dover, I Chauncey V. Bunnell. Jersey City, I Chauncey V. Bunnell. Jersey City, I Chauncey V. Bunnell. Jersey City, I  *John Greeves. Summit, I Chauncey V. Bunnell. Jersey City, I  *John Greeves. Jersey City, I Chauncey V. Bunnell. Jersey City, I Chauncey V. Bunnell. Jersey City, I  **John Greeves. Jersey City, I **John Greev	N. J.

<sup>\*</sup> In the service of the local board of health.

*Charles F. Conrad	Newark, N. J.					
Percy W. Sipp	Newark, N. J.					
*H. S. Winterhalter	Bayonne, N. J.					
Jay E. Kilpatrick	Montclair, N. J.					
W. J. E. Seder	Newark, N. J.					
*Alonzo Brower	Freehold, N. J.					
*Frederick E. Wilson	Bayonne, N. J.					
David R. Thompson						
*Jay G. Foose						
*William H. Lowe, D.V.S	Paterson, N. J.					
Charles W. Harreys, M.D	Ridgewood, N. J.					
Joseph C. Bitler, M.D	Hammonton, N. J.					
*Lynford E. Tuttle, M.D.V						
James L. Ollif	Plainfield, N. J.					
J. J. Reason, M.D						
*Alfred C. Benedict, M.D	South Orange, N. J.					
*John H. Winslow, M.D	Vineland, N. J.					
*Harry R. Ingalls	Asbury Park, N. J.					
Edward F. Flynn	Newark, N. J.					
*Elvia Scott						
Harris Day, M.D						
A. I. Goehrig	Trenton, N. J.					
Harry E. Moffett	Newark, N. J.					
Irwin C. Dakin						
William Gleuck, Jr						
Fred. S. Ball, M.D	Lakewood, N. J.					
Sanitary Inspector of Second Cl	ass.					
*Charles Cunningham, M.D	Hammonton, N. J.					
,						
Sanitary Inspectors of Third Cl						
David Jamieson	Gloucester City. N. J.					
*Robert A. Hirner	Woodbridge, N. J.					
	,					
Mark Inspectors						
Meat Inspectors.						
*G. F. Harker, D.V.S.						
*Richard W. Hewitt, D.V.S						
Willet H. Cooper, D.V.S						
*Albert T. Sellers, D.V.S						

<sup>\*</sup> In the service of the local board of health.

## Report on Infectious Diseases of Animals.

BY A. CLARK HUNT, STATE MEDICAL INSPECTOR.

To the Board of Health of the State of New Jersey:

GENTLEMEN-During the year ending October 31st, 1907, no cases of authrax have been reported. On February 11th, 1907, five cases of equine mange were reported in Hopewell township, Mercer county, and February 14th, 1907, five cases of the disease were reported as existing in Califon, Hunterdon county. The animals were examined by veterinarians and appropriate remedies suggested. The local boards of health in the townships in which the disease occurred supervised and enforced effective quarantine. There was no spread of the disease from the premises upon which it originally appeared. Two additional cases of mange were reported as existing in Hudson county. In one instance the affected animal was destroyed and in another appropriate measures were adopted to prevent well animals from contracting the disease. The occurrence of scabies in horses in Atlantic City last year, and again in widely separate portions of the State this year, would indicate that owners of horses should use special care to detect the disease at the earliest moment so that it may not be conveyed to other animals, and when any animal indicates by rubbing against immovable objects that there is some irritation of the skin the advice of a veterinarian should at once be sought. Two cases of rabies were reported, one occurring in Salem county and the other in Jersey City. A report was received of a case of anthrax in the person of a man. The history of the case proved that the person who contracted the disease was employed as a freight handler. and in this capacity the hides of animals had passed through his hands. Undoubtedly some of the hides were infected with the bacillus anthracis.

The total number of cases of glanders which have been reported during the year is 108, as compared with 147 reported during the previous year. Five cases which were not included in the summary of the year ending October 31st. 1906, were also reported. Sixteen horses were destroyed in Bergen county, and there is reason to believe that the animals had contracted glanders. These cases were not reported. Examination of the summary for the present year shows that over 80 per cent. of the cases of glanders which were reported occurred in Bergen, Passaic, Essex, Hudson and Burlington counties. These counties are located near the cities of New York and Philadelphia, and the cases are often traceable originally to animals purchased in these cities. Of this number thirty-eight cases occurred in Newark and eleven in Jersey City. Of the total cases reported forty-six occurred in Essex county, twenty-eight in Hudson county and eleven in Burlington county, the remaining cases being distributed over various parts of the State.

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Cases of rabies reported. 2 Cases of mange reported. 12						
The following is a list of the cases of glanders which have occurred in New						
Jersey during the yea	r endii	ng October	31st	, 1907:	•	
		d number reported.		ame of person naking report.	_	osal of
NewarkNo		-				
"			ט. יט	. Chandler, H.O	WIIIIM I	destroyed.
			**	" . "	44	44
44			44	"	44	44
Moorestown "				Stroud, M.D	"	44
Union "				Harrison, D.V.S	**	**
Jersey City '			··	. Hairison, D.V.S	"	**
Newark '				Corliss, V.S	"	**
Orange				am. Schluer, H.O	**	**
Newark				. Chandler, H.O	"	44
West Orange De	_ '			. Maghee, M.D	"	**
Jersey City '				athews, D.V.S	44	**
Wallington '				Lowe, D.V.S	4.	44
PassaicJa		1907, 1	···	" "	4	44
Bogert Heights '	7		44	" "	44	44
Bayonne '				Halliday, D.V.S	44	**
Jersey City '				athews, D.V.S	**	**
Kearny '				Geissler, Ins	**	**
Jersey City '				nith, V.S	44	44
Asbury Park '				Obert, H.O	"	44
Newark '				. Chandler, H.O	**	44
West Orange '		·		. Maghee, M.D	"	٠.,
Maple ShadeFe				. Mecray, V.M.D	44	44
Orange '		•		Smith, D.V.S	"	44
Montclair '				" "	44	**
Swedesboro '		·		Rogers, D.V.S	"	44
RaritanMa		•			**	44
Newark		. " 1	Ď. Ď	Voorhees, D.V.S Chandler, H.O	"	**
"			4.		**	44
Jersey City '		•	A. 8.	Mount, D.V.S	61	**
Newark '		•	D. D	. Chandler, H.O	"	44
Ridgefield Park	' 18	. " 1	w. v	V. Curry, D.V.S	"	"
Newark		•	D. D	. Chandler, H.O	"	44
Belle MeadAr	ril 1	. " 1	E. R	. Voorhees, D.V.S	"	**
West New York		•	R. F	. Meiners, D.V.S	**	**
West Hoboken		•		" " …	• •	**
Bayonne		•	R. J.	Halliday, D.V.S	**	**
Ridgewood		•	A. G	. Hopper, D.V.S	"	44
Montclair		•		. Harrison, D.V.S	**	"•
Kingsland		•	"	" "	**	"
	' 13	•	E. R	. Voorhees, D.V.S	"	44

15, "

16, "

20, "

29, "

15, "

15.

Blackwood .....

Newark .....

Bayonne ....... "

Raritan ..... "

Jersey City ..... May Union Hill ...... " 1...T. B. Rogers, D.V.S.....

1...D. D. Chandler, H.O.....

1...R. J. Halliday, D.V.S.....

1...E. R. Voorhees, D.V.S....

1...E. Mathews, D.V.S...... 2...R. F. Meiners, D.V.S.....

	te an cases			Disposal of each case.
Newark May	17,	1907	', 1D. D. Chandler, H.OA	nimal destroyed.
"	17,	44	2 " " "	
Jersey City "	27,	"	1A. S. Mount, D.V.S	"
West Hoboken "	28,	"	1R. F. Meiners, D.V.S	"
West New York "	28,	"	1 " " "	**
Newark "	28,	**	1D. D. Chandler, H.O	"
New Brunswick "	28,	"	1E. L. Loblein, D.V.S	"
Jersey CityJune	1,	44	1E. Mathews, D.V.S	is 44
Freehold "	5,	**	2V. B. Height, D.V.S	44
Newark "	7,	"	1D. D. Chandler, H.O	**
Woodbury "	11,	"	1A. T. Sellers, D.V.S	şi 44
Newark "	14,	**	1D. D. Chandler, H.O	**
Jersey City "	21,	"	1F. E. Smith, D.V.S	**
Newark "	22,	"	1D. D. Chandler, H.O	**
Hanover NeckJuly	3,	**	2W. F. Harrison, D.V.S	"
Newark "	6,	"	1D. D. Chandler, H.O	4.
Jersey City "	13,	2.6	1F. E. Smith, D.V.S	**
Newark "	21,	"	1D. D. Chandler, H.O	46 46
"	22,	"	3 " " "	6
"	26,	66	3 " " "	**
44 44	30,	66	6 " " "	**
PassaicAug.	20,	44'	1W. H. Lowe, D.V.S	44
Roosevelt "	29,	"	1E. L. Loblein, D.V.S	"
Newark Sept.	5,	**	1D. D. Chandler, H.O	"
Harrison "	26,	"	1W. H. Lowe, D.V.S	" "
Newark "	28,	"	1D. D. Chandler, H.O	" "
Hoboken "	30,	"	2D. J. Dixon, D.V.S	"
NewarkOct.	5,	44	1D. D. Chandler, H.O	"
Hoboken "	7,	**	1W. H. Lowe, D.V.S	"
North Bergen "	7,	44	1 " " "	• • • • • • • • • • • • • • • • • • • •
Jersey City "	7,	44	1E. Mathews, D.V.S	"
Newark "	9,	44	2D. D. Chandler, H.O	" "
" "	16,	"	2 " " "	· · · · · · · · · · · · · · · · · · ·

# Inspection of Public Water Supplies in New Jersey.

BY A. CLARK HUNT, M.D., STATE MEDICAL INSPECTOR.

To the Board of Health of the State of New Jersey:

GENTLEMEN—The following is a detailed statement showing the pollutions of public water-supplies which have been observed during the past year, and also the action which has been taken to secure the discontinuance of such pollutions:

#### NEW BRUNSWICK.

The water-supply for the city of New Brunswick is taken from what is known as Weston's pond. The Lawrence brook, from which this pond is supplied, has its origin near Monmouth Junction. The only locality along the brook in which there are any considerable number of houses is what is known as Milltown. At this point is located a large factory, and also the power plant of the Public Service Corporation. From time to time the attention of the board has been called to pollutions at this point, and several years ago it was found that the factory had basins and toilet fixtures connected with the stream. A notice was sent to the owners of the factory, and these pollutions were discontinued. During the past year pollutions of the stream have been noted as follows:

No. 345. Inspection of the premises located at Milltown, Middlesex county, showed that wash water from a hotel was running through a brick channel, and was conveyed directly into the pond. Also that two small streams running from springs rising in a hen yard discharged into the pond. Notices were served upon the owner to discontinue the contaminations of the stream at this point, and upon reinspection of the premises the contaminations were not noticeable.

No. 346. An inspection of the premises at Milltown occupied by the International Tire Company showed that waste water from vulcanizers, sink washings, and also refuse from a dump in the yard were discharged into the pond. Notice was sent to the owners in reference to these matters, and an effort will be made to prevent the further pollution of the stream at this point.

#### OBANGE.

The water-supply for the city of Orange is obtained from the west branch of the Rahway river. In previous years a number of pollutions of this stream have been noted, and action taken to prevent the continuance of sources of con-

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tamination. During the year a reinspection has been made of the stream and the following contaminations noted:

No. 356. An inspection of premises located on Northfield avenue, West Orange, showed that a privy vault, which was filled to overflowing, was located on the banks of the stream. The distance from the vault to the stream was ten feet. A notice was served upon the owner to discontinue the contamination, and a reinspection of the premises showed that the privy had been moved to a point well away from the stream.

No. 358. An inspection of premises located on Northfield avenue, West Orange, showed that a privy was located within four feet of a stream which is one of the tributaries of the west branch of the Rahway river, and that the contents of the vault were leaching upon the ground near the stream. Notice was served upon the owner to discontinue further contamination of the stream at this point, and a reinspection showed that the privy had been cleaned, and that tubs were used to receive dejecta.

No. 359. An inspection of premises located on Northfield avenue, near Ridgway avenue, West Orange, showed that house drainage from a store and two houses was conducted to a cesspool located in a yard. This cesspool was surrounded with broken stone. Sewage found its way through these small stones to a small brook on the roadside on Ridgway avenue, and thence by a tributary to the west branch of the Rahway river. A notice was served upon the owner to discontinue the contamination of the stream at this point, but it is difficult to secure evidence which will lead to conviction. On a recent reinspection no discharge of sewage into the stream at this point was noticeable.

No. 360. An inspection of premises located on Pleasant Valley road, West Orange, showed that a privy on the premises was located within thirty feet of one of the tributaries of the west branch of the Rahway river, and that the contents of the vault were overflowing toward the stream. A notice was served upon the owner to discontinue the contamination of the waters of the stream at this point, and the matter will be referred to the attorney-general for such action as the law provides.

No. — . An inspection of premises located on Ridgway avenue, West Orange, showed that a fourteen-inch sewer discharged into a small stream, which in turn discharged into the west branch of the Rahway river. Along this sewer several new houses have been erected, and although it was stated that there was no discharge from these houses into the sewer, nevertheless there was evidence at the outlet that sewage was being discharged into the sewer. The agent representing the owner, however, stated that if any such connection existed it would be discontinued. A reinspection of the premises showed that the owner had taken action, and that no sewage was discharging from the sewer pipe.

#### RANCOCAS CREEK.

During the past summer an inspection has been made of the south branch of the Rancocas creek, from which the water-supply for Lumberton is obtained. A number of contaminations were discovered, and prompt action was taken to discontinue the contamination of the stream as far as possible. The record of the pollutions which have been discovered and of the action which has been taken in every instance is herewith submitted:

No. 315. An inspection of premises located at Eayrestown showed that excreta was collected beneath a privy vault within nine feet of the waters of

the south branch of the Rancocas creek, and also that the discharges of a typhoid fever patient were buried within four feet of a pond connected with the stream above mentioned. A notice was served upon the owner to discontinue the contamination, and a reinspection of the premises showed that the privy vault had been cleaned, and that the owner intended to construct a tight vault.

No. 316. An inspection of premises located at Eaverstown showed that a pile of manure was placed within eight feet of the stream. A notice was served upon the owner requiring the immediate discontinuance of the contamination. A reinspection showed that the manure had been removed, and that the premises were in a cleanly condition.

No. 317. An inspection of premises located at Eayrestown showed that a privy vault was located within eighteen feet of the stream, and that excrement was upon the ground in the rear of the building, also that a chicken-yard bordered upon the stream. A notice was served upon the owner requiring the discontinuation of the contamination, and as reinspection showed that the notice had not been complied with, the case was referred to the attorney-general for such action as the law provides.

No. 317½. An inspection of premises located at Eayrestown showed that fecal matter from a privy vault was placed upon the ground within eighteen feet of the waters of the stream; also that a hogpen was located within eighteen feet of the stream, and that in times of heavy rain contaminating matters would be conveyed directly into the stream. A notice was served upon the owner to discontinue the contamination of the waters of the stream at this point. Upon reinspecton of the premises it was found that no action had been taken to abate the nuisance, but the owner stated that both the pigpen and the privy would be removed to a point further distant from the stream.

No. 318. An inspection of premises located at Eayrestown showed that fecal matter was deposited upon the ground beneath a privy building within sixty feet of the waters of the stream, and that in times of heavy rain the waters of the creek would be contaminated thereby. A notice was served upon the owner to discontinue the contamination of the waters of the stream at this point. A reinspection showed that the premises were untenanted.

No. 319. An inspection of premises located at Eayrestown showed that two privy vaults and a hogpen were located within sixty feet of the waters of the stream, and that surface drainage was toward the stream. A notice was served upon the owner requiring the discontinuance of the contamination at this point, and as it was found upon reinspection that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 320. An inspection of premises located at Eayrestown showed that a privy was placed directly over the stream. A notice was served upon the owner to discontinue the contamination, and a reinspection of the premises showed that the privy had been removed.

No. 321. An inspection of premises located at Vincentown, on the south branch of the Rancocas creek, showed that excrement was placed upon the ground beneath a privy vault within fifteen feet of the waters of the stream. and that the ground surface sloped from the privy toward the stream. Also that a sink drain discharged waste liquids beneath the privy building, and that these waste liquids flowed directly into the stream. A notice was served upon the owner to discontinue the contamination, and as a reinspection showed that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 322. An inspection of premises located at Vincentown showed that excrement was placed upon the ground beneath a privy building within fifteen feet of the stream, and that the ground sloped sharply toward the stream. Also that a house drain upon the same premises discharged into the stream. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 323. An inspection of premises located at Vincentown showed that excrement was placed upon the ground beneath a privy building fifteen feet from the waters of the stream, and that the ground slopes rapidly from the privy toward the stream. A notice was served upon the owner to discontinue the contamination, and a reinspection of the premises showed that the notice had been complied with.

No. 324. An inspection of premises located at Vincentown showed that a privy was located within twenty feet of the stream, and that human excrement was upon the ground in the rear of the privy. A notice was served upon the owner to discontinue the contamination of the stream at this point, and upon reinspection it was found that a new vault had been built and that the house was untenanted.

No. 325. An inspection of premises located at Vincentown showed that human excrement was placed upon the ground beneath a privy building within forty feet of the stream. A notice was served upon the owner to discontinue the contamination of the stream at this point. A reinspection of the premises showed that the notice had not been complied with, and the matter will be referred to the attorney-general for such action as the law provides.

No. 325a. An inspection of premises located at Vincentown showed that a slaughter-house, stable and hogpen were located within twenty-five feet of the waters of the stream, and that during rains waste liquids would be undoubtedly carried to the stream. A reinspection of the premises showed that the slaughter-house was not in use, and no further action was taken.

No. 326. An inspection of premises located at Vincentown showed that excrement was placed upon the ground beneath a privy building within eight feet of the stream. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 327. An inspection of premises located at Vincentown showed that waste liquids and kitchen refuse were placed upon the banks of the stream. A notice was served upon the owner to discontinue the contamination, and a reinspection of the premises showed that the notice had been complied with.

No. 328. An inspection of premises located at Vincentown showed that a privy building was placed directly over the stream, and that stable manure was placed upon the banks of the stream. A notice was served upon the owner to discontinue the contamination, and as a reinspection showed that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 329. An inspection of premises located at Vincentown showed that stable manure was placed upon the bank of the stream; that a privy building was placed directly over the stream, and that a house drain discharged liquid waste directly into the stream. A notice was served upon the owner to discontinue the contamination of the stream, and as reinspection showed that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 330. An inspection of premises located at Vincentown showed that a privy was placed directly over the stream, and that a sink drain discharged liquid waste into the stream. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 331. An inspection of premises located at Vincentown showed that a privy building was placed directly over the stream, and that a sink drain discharged liquid waste into the stream. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 332. An inspection of premises located at Vincentown showed that liquid waste was being discharged from a house drain directly into the stream. A notice was served upon the owner to discontinue the contamination, and a reinspection showed that a cesspool had been built and the house drain disconnected from the stream.

No. 333. An inspection of premises located at Vincentown showed that a privy, beneath which there was excrement, was situated within thirty feet of the stream, and that during times of freshet the water covers the ground surrounding the privy. A notice was served upon the owner to discontinue the contamination of the stream, and the matter was referred to the attorney-general for such action as the law provides. A reinspection of the premises at a later date showed that the privy had been removed.

No. 334. An inspection of premises located at Vincentown showed that liquid waste from a house drain was discharged into the waters of the stream. A notice was served upon the owner to discontinue the contamination, and a reinspection of the premises showed that a cesspool had been constructed.

No. 335. An inspection of premises located at Vincentown showed that excrement was placed beneath a privy building located eighteen feet from some low ground, and that in times of heavy rains contaminating materials were washed into the stream. Notice was served upon the owner to discontinue the contamination of the stream at this point, and as upon reinspection it was found that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 336. An inspection of premises located at Vincentown showed that waste liquids from a house were discharged through a sink drain directly into the waters of the stream. A notice was served upon the owner to discontinue the contamination, and a reinspection showed that the drain had been removed and a cesspool built.

No. 337. An inspection of premises located at Vincentown showed that a pile of manure collected from a horse and cow stable was placed within ten feet of the stream. A notice was served upon the owner to discontinue the contamination, and upon reinspection it was found that the manure had been moved, and the owner promised to avoid any further accumulation of such manure.

No. 338. An inspection of premises located at Vincentown showed that house sewage was discharged through a drain upon the ground, and flowed over the surface of the ground to the stream, twenty feet distant. A notice was served upon the owner to discontinue the contamination, and upon reinspection it was found that the drain had been disconnected and that the owner intended to construct a cesspool.

No. 339. An inspection of premises located at Vincentown showed that



sewage was discharged through a house drain directly into the waters of the stream. A notice was served upon the owner to discontinue the contamination of the waters of the stream at this point, and upon reinspection it was found that a cesspool was being constructed.

No. 340. An inspection of premises located at Vincentown showed that excrement was placed upon the ground beneath a privy building within forty feet of the stream, and that the ground sloped rapidly toward the stream. A notice was served upon the owner to discontinue the contamination of the stream at this point, and a reinspection of the premises showed that a vault had been constructed.

No. 341. An inspection of premises located at Vincentown showed that sewage was discharged through a drain directly into the stream. To this drain a hotel and private residences were connected. A notice was served upon the owner to discontinue the contamination of the stream at this point, and reinspection showed that the sewer pipe had been abandoned and a cesspool constructed.

No. 342. An inspection of premises located at Vincentown showed that liquid waste from a sewer with which several dwellings were connected was discharged directly into the stream. Also that rubbish was placed upon the banks of the stream, and that excreta was deposited beneath a privy building within fifteen feet of the stream. A notice was served upon the owner to discontinue the contaminations of the stream at this point, and a reinspection showed that the sewer had been disconnected from the stream and an effort made to comply with the notice.

No. 343. An inspection of premises located at Vincentown showed that sewage was discharged through a joint sewer into the stream. Two houses were connected with the sewer. A notice was served upon the owner to discontinue the contamination, and upon reinspection of the premises it was found that the notice had been complied with.

No. 344. An inspection of premises located at Vincentown showed that washings from a slaughter-house were discharged into a ditch leading to the stream, which is one hundred and fifty feet distant. A notice was served upon the owner to disontinue the contamination of the stream at this point, and a reinspection showed that the slaughter-house was not in use.

No. 344a. An inspection of premises located at Kirby's mills showed that at infrequent intervals contaminating materials were discharged into the raceway under the mill. The owner stated that the contamination would be discontinued at once.

No. 353. An inspection of premises located at Vincentown showed that excreta from a privy building was discharged directly into the waters of the stream. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the privy had been moved.

#### RARITAN RIVER.

From this stream the water-supply of the towns of Somerville and Raritan is obtained. The record of inspections of tributaries of the north branch of the Raritan river, which have been made during the past summer, is as follows:

No. 314. An inspection of premises located near Pluckamin, Somerset county, showed that dye stuffs and washings from wool were discharged into a stream which is one of the tributaries of the north branch of the Raritan river, and that the waters of the stream were contaminated thereby. A notice was served

upon the owners to discontinue the contamination of the stream, and a plan was devised by the owners for the purpose of avoiding further contamination of the stream. A reinspection of the premises showed that the plan was unsatisfactory, and that dye-colored liquids were still discharged into the stream. Another notice was served upon the owners, and no action being taken to discontinue the pollution the case has been referred to the attorney-general for such action as the law provides.

No. 421. An inspection of premises located near Bernardsville showed that waste liquids from a sink drain were discharged into Mine brook, which is one of the tributaries of the north branch of the Raritan river. A notice was served upon the owner to discontinue the contamination of the stream at this point, and a reinspection showed that the conditions were unchanged. The matter will be referred to the attorney-general for such action as the law provides.

No. 422. An inspection of premises located near Bernardsville showed that contaminating materials from a privy were discharged into Mine brook. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 423. An inspection of premises located at Bernardsville showed that a privy was placed immediately over Mine brook. A notice was served upon the owner to discontinue the contamination, and reinspection showed that a wault had been constructed.

No. 424. An inspection of premises located at Bernardsville showed that a privy vault was located within forty-five feet of Mine brook. A notice was served upon the owner to discontinue the contamination of the stream at this point, and reinspection showed that the privy had been moved.

No. 425. An inspection of premises located at Bernardsville showed that a heap of manure was placed within five feet of Mine brook. A notice was served upon the owner requiring the removal of the manure, and reinspection showed that the notice had been complied with.

No. 426. An inspection of premises located at Bernardsville showed that cesspool contents were discharged by an underground pipe into a roadway ditch, and from thence into Mine brook. A notice was served upon the owner to discontinue the contamination, and a reinspection showed that a new cesspool had been constructed in the rear of the dwelling and far removed from the stream.

No. 427. An inspection of premises located at Bernardsville showed that an open privy vault was placed within three feet of Mine brook, and that a manure pile was also located near the stream. A notice was served upon the owner to discontinue the contaminations at this point, and a reinspection showed that the manure pile had been moved and a new privy with tight vault constructed.

No. 428. An inspection of premises located at Bernardsville showed that a privy vault was located two feet from a tributary of Mine brook. A notice was served upon the owner to discontinue the contamination, and reinspection showed that the privy had been moved and a partially tight vault constructed.

#### DELAWARE RIVER.

From this river is obtained the public water-supply for the city of Trenton. The attention of the board was called to certain pollutions of the Delaware river, above the intake of the public water-supply of Trenton, about 1896, and inspections of the stream and laboratory examinations of the water drawn from the city supply, furnished evidence showing that the water was receiving pollut-

ing material. As soon as this conclusion was reached, a communication was forwarded by the State board of health to the president of the board of water commissioners of the city of Trenton. Following this correspondence, Allen Hazen, C.E., was employed by the water commissioners of the city to investigate and advise concerning the measures necessary to render the water-supply of the city wholesome and safe for domestic use. Mr. Hazen made a thorough investigation of the sources of supply, and on November 30th, 1900, submitted a report to the commissioners. After drawing attention to the numerous sources of pollution, and showing that the water shed from which the supply was obtained covered an area of 6.916 square miles upon which there was an estimated population, in 1900, of sixty-six persons per square mile, the conclusion was definitely reached and stated that to avoid the risk of epidemics of typhoid fever the water should be filtered before delivery to consumers. The recommendation was made at that time that a fifteen million gallon filtration plant should be constructed near the reservoir, and the estimated cost of such a plant was placed at \$400,000. No action was taken toward the introduction of a filtration plant in accordance with the recommendations made by Mr. Hazen. Inspection of the stream has shown that pollution of its waters is constantly increasing. This is due largely to the rapidly increasing population of cities situated on the banks of the river and its tributaries, both in New Jersey and Pennsylvania, and will steadily tend to increase the impurity of the water of the river. During the past year inspections have been made of various portions of the Delaware river, and a record of these inspections is herewith submitted. Since September 13th, 1907, inspections have been made at Lambertville, Belvidere and Frenchtown, as follows:

No. 358a. An inspection of premises located at Lambertville showed that two privies were placed over a creek which discharges into the Delaware river. A notice was served upon the owner to discontinue the contamination, and a reinspection showed that vaults were being constructed.

No. 359a. An inspection of premises located at Lambertville showed that the contents of a privy vault were discharged directly into a creek which is one of the tributaries of the Delaware river. A notice was served upon the owner to discontinue the contamination, and upon reinspection it was found that a tight vault had been constructed.

No. 360a. An inspection of premises located at Lambertville showed that drainage from a mill discharged into a creek which is one of the tributaries of the Delaware river, and also that two privies were so arranged that contaminating materials were discharged into the creek. A notice was served upon the owner to discontinue the contaminations, and a reinspection showed that a cesspool had been constructed and the notice complied with.

No. 361. An inspection of premises located at Bernardsville showed that a privy was placed near a creek which is one of the tributaries of the Delaware river, and also that garbage was thrown into the creek. A notice was served upon the owner to discontinue the contamination, and a reinspection showed that the garbage had been moved from the bank of the stream and a tight privy vault constructed.

No. 362. An inspection of premises located at Lambertville showed that a privy was placed on the bank of a creek which is one of the tributaries of the Delaware river, and that garbage was also deposited near the stream. A notice was served upon the owner to discontinue the contamination, and a reinspection showed that the garbage had been moved and the privy placed at a distance of fifty feet from the stream.

No. 363. An inspection of premises located at Lambertville showed that a privy was placed on the bank of a creek which is one of the tributaries of the

Delaware river, and that garbage was also deposited near the stream. A notice was served upon the owner to discontinue the contamination, and a reinspection showed that the garbage had been moved and a tight privy vault constructed.

No. 364. Inspection of premises located at Lambertville showed that two privies were placed on the banks of the creek, and that garbage was also placed upon the banks of the stream. A notice was served upon the owner to discontinue the contamination, and reinspection showed that tight vaults had been constructed and the garbage removed.

No. 365. An inspection of premises located at Lambertville showed that a privy was placed directly over the creek. A notice was served upon the owner to discontinue the contamination at this point, and as a reinspection showed that the notice was not complied with the matter was referred to the attorney-general for such action as the law provides.

No. 366. An inspection of premises located at Lambertville showed that a privy was placed on the banks of the creek, and that at times of high water the contents of the privy vault would be washed directly into the stream. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 367. An inspection of premises located at Lambertville showed that three privies in the rear of houses were so placed that contaminating material was discharged into the creek. A notice was served upon the owner to discontinue the contamination of the stream, and reinspection showed that the notice had been complied with.

No. 368. An inspection of premises located at Lambertville showed that a privy was placed on a tributary of the Delaware river. A notice was served upon the owner to discontinue the contamination of the stream at this point, and reinspection of the premises showed that the notice had been complied with.

No. 369. An inspection of premises located at Lambertville showed that a privy was located directly over Swan creek, which is one of the tributaries of the Delaware river. A notice was served upon the owner to discontinue the contamination, and a reinspection of the premises showed that the notice had been complied with.

No. 370. An inspection of premises located at Lambertville showed that a privy was so placed that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and a reinspection of the premises showed that the notice had been complied with.

No. 371. An inspection of premises located at Lambertville showed that a privy was so located on the bank of Swan creek that contaminating material was discharged into the stream. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 372. An inspection of premises located at Lambertville showed that a privy was so placed that contaminating material was discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice will be complied with.

No. 374. An inspection of premises located at Lambertville showed that a privy was so located that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination of the stream, and reinspection of the premises showed that the owner was about to construct a tight vault.

No. 375. An inspection of premises located at Lambertville showed that a



privy was placed directly over Swan creek. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 376. An inspection of premises located at Lambertville showed that a privy was so located that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 377. An inspection of premises located at Lambertville showed that two privies were placed directly over Swan creek. A notice was served upon the owner to discontinue the contamination of the stream, and as reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 378. An inspection of premises located at Lambertville showed that contaminating fluids from a sink drain were discharged into a gutter and thence through a conduit into Swan creek. A notice was served upon the owner to discontinue the contamination of the stream, and as reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 379. An inspection of premises located at Lambertville showed that a privy was so located that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 380. An inspection of premises located at Lambertville showed that contaminating materials from a sink drain were discharged into a gutter and thence through a conduit into Swan creek. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 381. An inspection of premises located at Lambertville showed that contaminating materials from a sink drain were discharged into a gutter and thence through a conduit into Swan creek. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 382. An inspection of premises located at Lambertville showed that contaminating materials from sink drains from three houses were discharged into a gutter and thence through a conduit into Swan creek. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 383. Inspection of premises located at Lambertville showed that contaminating materials were discharged through a sink drain into a gutter, and thence through a conduit into Swan creek. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 384. An inspection of premises located at Lambertville showed that a privy was so located that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 385. An inspection of premises located at Lambertville showed that a privy was so located that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 386. An inspection of premises located at Lambertville showed that a privy was so located that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 387. An inspection of premises located at Lambertville showed that a privy was located within two feet of Swan creek, and that contaminating materials were discharged into the waters of the stream. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 388. An inspection of premises located at Lambertville showed that two privies were so located that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 389. An inspection of premises located at Lambertville showed that privies in the rear of three houses were so located that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 390. An inspection of premises located at Lambertville showed that a privy was so located that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 391. An inspection of premises located at Lambertville showed that the contents of a privy vault were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and a reinspection of the premises showed that the notice had been complied with.

No. 392. An inspection of premises located at Lambertville showed that a privy was so located that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 393. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with

No. 394. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 395. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination of the stream, and a reinspection of the premises showed that the notice had been complied with.

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# 144 REPORT OF THE BOARD OF HEALTH.

No. 396. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 397. An inspection of premises located at Lambertville showed that a privy was situated within four feet of Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 398. An inspection of premises located at Lambertville showed that a privy was situated on the bank of Swan creek, and that contaminating materials were discharged into the creek. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 399. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 400. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination of the stream, and reinspection showed that the notice had been complied with.

No. 401. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied

No. 402. An inspection of premises located at Lambertville showed that contaminating materials were discharged from a sink drain directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 403. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 404. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into-Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection showed that the premises were unoccupied.

No. 405. An inspection of premises located at Lambertville showed that a privy was so placed that contaminating materials were discharged into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that a tight vault had been constructed.

No. 406. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that a tight vault had been constructed.

No. 407. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the privy had been moved to a point ten feet distant from the creek and a tight vault constructed.

No. 408. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection showed that the privy had been moved to a point fifty feet from the creek.

No. 409. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the privy had been moved to a point fifty feet distant from the creek and a tight vault constructed.

No. 410. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the privy had been moved to a point fifty feet distant from the stream and a tight yault constructed.

No. 411. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the privy had been moved to a point fifty feet from the stream and a tight vault constructed.

No. 412. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that a tight vault had been constructed.

No. 413. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the privy had been moved to a point seventy-five feet distant from the stream.

No. 414. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the privy had been moved to a point seventy-five feet distant from the stream.

No. 415. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the privy had been moved to a point seventy-five feet distant from the stream.

No. 416. An inspection of premises located at Lambertville showed that a privy was so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the privy had been moved to a point seventy-five feet distant from the stream.

No. 417. An inspection of premises located at Frenchtown showed that two privies were so situated that contaminating materials were discharged directly into a tributary of the Delaware river. A notice was served upon the owner

to discontinue the contamination, and reinspecton of the premises showed that both privies had been moved.

No. 418. An inspection of premises located at Frenchtown showed that contaminating materials were discharged from a house drain on said premises directly into one of the tributaries of the Delaware river. A notice was served upon the owner to discontinue the contamination, and as reinspection of the premises showed that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 419. An inspection of premises located at Frenchtown showed that a privy was placed directly over a tributary of the Delaware river. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 420. An inspection of premises located at Frenchtown showed that a privy was so situated on the bank of a tributary of the Delaware river that contaminating materials were discharged directly into the stream. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that a tight vault had been constructed.

No. 429. An inspection of premises located at Belvidere showed that a privy was placed directly over Pequest creek, one of the tributaries of the Delaware river. A notice was served upon the owner to discontinue the contamination, and as reinspection showed that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 430. An inspection of premises located at Belvidere showed that a pig pen was placed upon the bank of Pequest creek, and that stable manure was placed within two feet of the creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the notice had been complied with.

No. 431. An inspection of premises located at Belvidere showed that a slaughter-house was situated on the bank of Pequest creek, and that contaminating materials from the floors of the slaughter-house and from a pig pen were discharged directly into the stream. A notice was served upon the owner to discontinue the contamination of the stream at this point, and upon reinspection it was found that the buildings had been destroyed by fire.

No. 432. An inspection of premises located at Belvidere showed that a privy was placed directly over Pequest creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the privy had been moved.

No. 433. An inspection of premises located at Belvidere showed that a privy was placed directly over Pequest creek. A notice to discontinue the contamination, was served upon the owner, and as reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 434. An inspection of premises located at Belvidere showed that a privy was placed directly over Pequest creek. A notice to discontinue the contamination was served upon the owner, and as reinspection showed that the notice had not been complied with, the matter was referred to the attorney-general for such action as the law provides.

No. 435. An inspection of premises located at Belvidere showed that a privy was placed directly over Pequest creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the privy had been moved.

No. 436. An inspection of premises located at Belvidere showed that a privy was placed directly over Pequest creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the privy had been moved.

No. 437. An inspection of premises located at Belvidere showed that a privy was placed directly over Pequest creek. A notice was served upon the owner to discontinue the contamination, and a reinspection of the premises showed that the privy had been moved.

No. 438. An inspection of premises located at Belvidere showed that a privy was placed directly over Pequest creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that the privy had been moved.

No. 439. An inspection of premises located at Belvidere showed that two privies were placed directly over Pequest creek. A notice was served upon the owner to discontinue the contamination, and as a reinspection showed that the notice had not been complied with the matter was referred to the attorney-general for such action as the law provides.

No. 440. An inspection of premises located at Lambertville showed that a privy was placed within three feet of Swan creek, and that contaminating materials were discharged directly into the stream. A notice was served upon the owner to discontinue the contamination of the stream at this point, and reinspection of the premises showed that the notice had been complied with.

No. 441. An inspection of premises located at Lambertville showed that two privies were so situated that contaminating materials were discharged directly into Swan creek. A notice was served upon the owner to discontinue the contamination, and reinspection of the premises showed that tight vaults had been constructed and the notice complied with.

# Report on Outbreak of Typhoid Fever in the State Hospital, Trenton.

BY HENRY MITCHELL, M.D., SECRETARY.

The State Hospital for the Insane, located about two and onehalf miles from the City Hall, but just within the boundary limits of the city of Trenton, was established in 1847, and until last spring no case of typhoid fever had developed on the hospital The site was originally selected because of the spring premises. which was located there, and this spring furnished all of the water used in the institution until about the year 1896, when three wells were drilled to increase the supply of water. Water was pumped from the spring and from the wells into a standpipe, and distributing mains and branches conveyed it to all of the various buildings on the hospital premises. Because the persons who were first attacked with typhoid fever were located in a wing of the main building nearest to the spring, and because the pipe supplying water to that wing also carried the water from the spring to the standpipe, a theory was considered early in the course of the inquiry which was made to trace the source of the infection, that the spring water was the medium through which the disease was being conveyed, but when the epidemic ceased, and all of the facts relating to the outbreak were on record, it was found that the disease did not attack persons who were not, either directly or indirectly, in contact with the sick or convalescent fever patients. The water which was obtained from the spring reached the standpipe without doubt, and it was there thoroughly mixed with the water pumped from the wells, and all of the buildings were connected with the mains through which the standpipe water was distributed, but no case of typhoid fever occurred in the annex, in which 400 inmates were confined. The deductions drawn from these facts and from negative investigations directed to the food-(149)

supply are stated in the reports which follow, copies of all of which were forwarded to the managers of the hospital.

# To the Board of Health of the State of New Jersey:

GENTLEMEN—Recent inquiries show that new cases of typhoid fever have continued to occur among the inmates of the State Hospital, Trenton, at the average rate of about one each day, up to and including August 13th, and among the conditions which at present favor the spread of the disease in the institution the following have been noted:

- 1. Convalescents freely mingle with the other inmates in the wards and dining-rooms, and through this agency infection and reinfection of dishes, door-knobs, chair-backs, &c., is constantly occurring.
- 2. Insane inmates are still retained in service in the kitchens and dining-rooms, and therefore there can be no assurance that orders and instructions requiring sterilization of spoons, forks, cups, &c., will be faithfully carried out.

In view of these facts it is recommended that measures be at once taken to separate all convalescents from other inmates, and to immediately discontinue to permit any patient in the institution to assist in the kitchens or diningrooms, or to have access to any portion of the building where the food is prepared or where the dishes are washed.

Very respectfully,

HENRY MITCHELL.

August 16th, 1907.

Secretary.

# To the Board of Health of the State of New Jersey:

GENTLEMEN—During a visit to the State Hospital, Trenton, made this day. it was learned that no new case of typhoid fever has occurred in the institution since August 13th, a period of nine days. In the course of an inspection of the central kitchen, the kitchen in the west wing and the kitchen in the annex, certain defects in location, construction, arrangement, lighting, ventilation and management were observed, and attention is particularly called to the following conditions: The central kitchen is located in the basement of the main building. The ceilings are low, the window space is small, one cell-like room containing two steam kettles has no window, artificial light being depended upon entirely. The sinks are made of wood and are worn out, the floors are constructed of wood, the refrigerator is worn out. The west kitchen is better located and better lighted than the one just described and it is conducted in a more cleanly manner, but in its location and construction it is not well adapted to the cleanly preparation of food. The kitchen in the annex is superior in construction to those above referred to, but it also is defective in certain particulars (wooden floors and sinks). The dishes, spoons, forks, &c., used by the insane inmates are washed by the inmates in wooden sinks in the dining-rooms. No reliance can be placed upon the faithfulness of these persons, and there is good reason to believe that the dish-washing performed by them cannot be depended upon to remove infective substances from the dining-room utensils.

Accumulations of dirt from the hands of the patients and attendants were found to be encrusted upon the doors of the kitchens and dining-rooms, and appearances indicate that these surfaces are never washed. Upon inquiry information was given by Mr. Fleitchman showing that neither the warden nor the medical officers of the hospital have accepted responsibility for cleanliness in the dining-rooms, and consequently there has been gross neglect in this

department. In the annex, where 400 inmates are fed, only three paid employes are provided, and the inmates are depended upon to render all of the additional service which may be required.

The inspection also shows that the polluted spring, located near the laundry, has not yet been filled with earth and rendered inaccessible as a source of water-supply.

Very respectfully,

HENRY MITCHELL,

August 22d, 1907.

Secretary.

At a meeting of the State Board of Health, held September 11th, 1907, the following action was taken:

WHEREAS, A report on file in this office, dated August 22d, 1907, draws attention to certain defects in the construction, equipment and management of the kitchens and dining-rooms of the State Hospital, Trenton.

Resolved, That in the judgment of this board the kitchens in the main building, because of their lack of light and ventilation, and because of their location and construction, are unsuitable for the preparation of food. All kitchens should be provided with ample openings for light and air; the floors should be impervious to water; the sink should not be made of wood or other absorbent material, and all openings should be screened against the entrance of flies.

Resolved, That in the opinion of this board the health of the inmates of the hospital is jeopardized by permitting the insane patients of the institution to aid in the performance of any duties which relate to the preparation, distribution or handling of the food, and we recommend that none but paid employes shall be entrusted with this service.

Resolved, That we further recommend that one capable and reliable person shall be fully authorized to have supervision over all storerooms, kitchens and dining-rooms, and that all employes in those departments be placed directly under his control; that said supervisor be held responsible for the maintenance of cleanly conditions and practices in and about said kitchens, storerooms and dining-rooms.

Resolved, That this board advises that there be no further delay in permanently closing the polluted spring, located near the laundry, by filling said spring with clean earth.

# FINAL REPORT.

To the Board of Health of the State of New Jersey:

GENTLEMEN—Twenty-eight days have now elapsed since a new case of typhoid fever has been reported from the State Hospital, Trenton, and we may therefore conclude that the epidemic which recently prevailed in that institution has finally ceased.

To briefly review the important facts having relation to this outbreak it may be stated that the first case occurred April 8th, 1907, in the person of an immate of the hospital, located in the west wing of the building, who probably contracted the disease in the city of Trenton. Subsequent cases occurred in the same wing, and up to August 13th eighty cases had appeared in the hospital with sixteen deaths. All of these cases were located in the main building of the institution and no cases occurred in the annex, notwithstanding that more than 400 of the inmates of the institution are cared for in that building.



Twenty-three employes and other residents in dwellings on the hospital premises were affected with the disease. Investigations concerning the food-supply, including milk and water, were negative, except that colon bacilli were found in the water of the spring from which a portion of the water provided for the hospital premises was obtained. Suspicion was at first directed to the water of this spring as the medium through which the infection was spread, but in the light of later developments it now appears improbable that the spring water had any influence whatever in conveying the infection, and we are led to the final conclusion that the disease was transmitted directly from patient to patient and through the agency of utensils and food infected within the building.

This conclusion is justified for the following reasons:

- 1. The disease first appeared in the west wing of the main building and spread to other inmates in this wing, and as facilities were not provided for the isolation of convalescents, the infection was communicated by them to other susceptible inmates.
- 2. The spoons, forks, cups, &c., used in the dining-rooms were washed by the insane inmates, without boiling, and, in the course of the epidemic, every utensil in the building probably became infected, thereby exposing the food which entered the building to infection as soon as it was received.
- 3. The filthy habits of many of the insane inmates of the hospital probably caused infected discharges to be generally distributed in the bathroom, upon the furniture, door-knobs and other surfaces touched by the hands of the infected persons.
- 4. From the west wing the infection was carried to other portions of the main building, but as above stated not a single case occurred in the annex, indicating that the infection was not conveyed by milk or water, for the supply of both of these articles was from the same sources for both buildings. The water-supply for all of the buildings on the hospital premises was taken from the same piping system, and in the standpipe, located near the annex, the water which was pumped into the mains from the spring and from the wells was undoubtedly thoroughly mixed before distribution to the various branches and service lines.
- 5. Inquiry has shown that communication between the infected kitchens of the main building and the dwellings of employes, where cases of typhoid fever occurred, was frequent.

#### RESTATEMENT.

- 1. Typhoid fever was brought to the State Hospital, Trenton, by an inmate who was admitted February 16, 1907, the diagnosis being made April 8th. This patient was located in the west wing.
- 2. The room-mate of the first patient contracted the disease, and also numerous other inmates in the same wing.
- 3. These persons were not isolated during their convalescence, and new cases continued to appear in the west wing and the disease was undoubtedly spread from patient to patient.
- 4. The disease did not attack the inmates located in the annex because they were not brought into contact with infected persons.
- 5. The disease finally subsided when all susceptible persons who were exposed to the infection had suffered an attack.

Very respectfully,

HENRY MITCHELL,

TRENTON, N. J., September 11th, 1907.

Secretary.



# Report on Inspection of Creameries.

BY GEORGE W. MCGUIRE, CHIEF INSPECTOR OF FOOD.

To the Board of Health of the State of New Jersey:

GENTLEMEN-The act governing the management of creamcries in New Jersey has been in operation one and a half years, having been approved April 20th, 1906. During this period, in addition to the specific improvements mentioned in detail in the last annual report of the board, much has been accomplished in the effort to improve the quality of milk handled in these establishments. The enforcement of the rules adopted by the board, under authority of the law, has had the effect of stimulating operators to adopt higher standards, and those whose plants were found to be conducted in an unsanitary way have had their licenses withheld until they finally met the requirements of the law. 'The owners of three creameries located at Pine Brook and Irvington, in Essex county, and at Blackwell's Mills, in Somerset county, were refused licenses on account of the unsanitary condition of their premises and the serious defects in the management and equipment of their plants. They finally abandoned these establishments and the buildings are now unoccupied. Seven new creameries have been built during the past year and are now in operation. the modern type, each having fine concrete floors and smooth interior surfaces and fully equipped with machinery calculated to insure the sanitary handling of milk. They are located at the following places: Bridgeton, Camden, Salem, Hampton Junction, Sharptown, Branchville and Hainesburg. The Salem, Camden and Hampton Junction plants are new enterprises and are built to accord with the requirements of the law in point of construction. The Sharptown, Branchville and Hainesburg buildings take the place of antiquated ones. are located on new sites and are deserving of favorable mention on account of the enterprise shown by the owners in their conclusions to abandon their old establishments and erect new ones equipped with every sanitary appliance to handle milk with the least risk of defilement. Samples of the water-supply of forty-eight creameries have been collected and analyzed in the State Laboratory of Hygiene and a number of them were found to be polluted. instances the source of pollution points to leaky floors and demonstrates the wisdom of the legal requirement for impervious floors. The following extracts taken from original reports made of three creameries will serve to show the defective and unsanitary conditions which existed in them at the time they were inspected and also point out the detrimental effect that such environment must necessarily have upon milk handled and stored in them:

No. 1. "Repeated inspections made of these premises show very careless management. At the time of this inspection the side walls were dirty. The space under the outside platforms was saturated with decomposing waste fluids and contained other accumulations of filth. All the doors of the cooling-rooms were open and unscreened, thus exposing the milk contained in uncovered vessels to dust from the outside as well as to the flies swarming about the premises. The wood floor in the washroom is water soaked and leaky. The wood floor in the receiving-room also leaks and foul odors are emitted from the space beneath it. The cooling-room also has a wood floor which is broken; the waste fluids in the bottling-room also leak through the floor to the space beneath. There is no change in the method of bottling milk, and the milk which overflows from the bottles is poured back into the reservoir and rebottled."

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No. 2. "Twenty-nine farmers supply daily 1,600 quarts of milk to this creamery. The floors, made of cement, are broken and coated with decomposed milk. The side walls are dirty. The engine-room adjoining the milkroom contains a swill vat filled with decomposing fluids and is very offensive to the sense of smell; the floor in this room is broken and offensive accumulations fill the cracks. The broken floor space around the drain outlet is filled with offensive accumulations. The whole interior of this creamery is dirty and the odor in the rooms is very offensive."

No. 3. "At the time of this inspection the milk-receiving room was filled with unclean milk cans, empty butter tubs, ice cream cans and quantities of indescribable rubbish. The floors and side walls were dirty. The cooling vat and the water contained in it was unclean. Three men are employed in the creamery and at the time of the inspection they were dressed in outer clothing which was stiff with dirt. The air of all the rooms was foul. A brush inserted in the interior of a pipe through which all milk passes brought forth a mass of decomposed milk and dirt."

In the case of No. 1 the creamery has been entirely reconstructed, the interior thoroughly cleaned, neatly painted and equipped with modern machinery. No. 2 is undergoing repairs; new floors and drains are in course of construction and it is hoped that the management will be more efficient. In the case of No. 3 there is little improvement, and it is my opinion that the milk handled in this creamery under the present management is unfit to use.

I am glad to be able to state that the cases cited are the exceptions to the majority of the creameries in this State. Many of them are under efficient and conscientious management, and not only do they give the milk held in their possession that careful attention which is essential to its purity, but they require the producers, as far as they can, to give it such care at their farms that it will reach the creamery at a low temperature and free from all taints. Milk as a rule is received at creameries once a day, generally in the morning from six to nine o'clock. The warm, or morning's milk, is kept separate from the night's milk, and the latter is about twelve hours older than the former. It is kept in the creamery at a temperature of from forty-five to forty degrees and is shipped in the afternoon between four and six o'clock, reaching its destination from ten to twelve o'clock, and is delivered to customers either the same night or early the next morning, so that if it is received by the customer at seven o'clock in the morning the night's milk is about thirty-six hours old and the morning's milk twenty-four hours. The above statement does not apply to milk shipped to Camden and Philadelphia. Milk trains to South Jersey points reach their destination from eight to ten A. M., too late for delivery on the same day, consequently the dealer is obliged to ice it and keep it for the next day's delivery, and when the milk reaches the consumer it is thirty-six to forty-eight hours old or twelve hours older than that received in North Jersey points. The problem of delivering milk to the customer at a temperature of not more than fifty degrees, as required by some municipalities, is a difficult one as the railroad transportation is now conducted, especially when a creamery is depended upon to supply the demand. In all well-conducted creameries the milk when shipped is at or below forty degrees, but no matter how careful the creameryman is to keep his milk at a low temperature, unless it is so kept on the cars it will not be taken out in a condition to meet the requirements of some boards of health. The only way to have milk delivered from creamery to city by transportation companies is to require them by law to deliver all milk and cream to the consignee at a temperature below fifty degrees, then all milk-carrying railroads will install refrigerator cars and the dealer can be held responsible for the delivery at a proper temperature. Following is a list of the creameries in New Jersey, together with a statement concerning the conditions existing on these premises as shown by the inspection records: Digitized by Google

List of Creameries in New Jersey by Counties, Showing Equipment and Nature of Improvement in Condition or Management During the Year 1907.

#### BURLINGTON COUNTY.

Location, Columbus. Supplee & Co., Owners.—This is a one-and-a-half-story frame building, with wood floors and wood-cooling vats. The water in the vats was found to be unclean at the time of inspection. Apparently little care was used to prevent portions of the water getting into the open milk cans in the operation of placing the full cans in the vat. A well located beneath the boiler-room was found to be polluted. The attention of the owners was called to these defects. A new well, the walls of which are laid with brick and cement, has since been dug outside of the engine-room. All milk is shipped to Philadelphia.

Location, Hartford. Owner and Manager, Thomas C. Plasket.—This is a butter creamery. From 600 to 1,200 quarts of milk are daily received, and the product is all sold to nearby towns. The building is a two-story frame structure, having an imperfect wood floor and a wood milk vat. 'The owner was notified to clean the pipes through which milk is transferred.

Location, Pemberton. Owners, Montgomery & Smith; Manager, George Montgomery.—This is a one-and-a-half-story frame building on the Kinkora branch of the Pennsylvania railroad. The main room, 45 x 30 feet, has a cement floor and cement vats. The inside walls are made of smooth boards and with a rough board ceiling. Milk is transferred to vats. The pulleys and shafting are placed directly over the exposed milk, and when in motion cause dust to drop to the milk. Water is obtained from the town standpipe. Attention was called by the board to the defect noted above. The milk is shipped to Philadelphia.

# CAMDEN COUNTY.

Location, Camden. Clements & Moore, Owners.—This creamery is located on Fourth street. The milkroom opens on the street; milk is received from the sidewalk and is exposed to dust from the street. After several reinspections, cement floors were repaired and the unsuitable pipes used for transferring milk from receiving vats to pasteurizer were replaced by pipes of shorter lengths and of larger diameter, the owner's attention having been called to these defects.

Location, Camden. Owner, Harry R. Read Co.; Manager, H. R. Read; located at 443 William Street.—The stables of the company are located on a court twenty feet in the rear of the creamery building. A manure pit in front of the stable affords a breeding place for flies, and, when being emptied, causes a strong odor to permeate the milkrooms. The company has been notified of this defect. Otherwise the interior of the building complies with the law relating to impervious floors and smooth surfaces.

Location, Camden. Owner and Manager, Howard W. Walford, 333 Senate Street.—This is a two-story brick structure, second floor not in use. There is a fine properly graded cement floor in the milkroom,  $40 \times 40$  feet, with rough plastered side walls and smooth board varnished ceilings. There is good equipment for washing cans and bottling milk. All farmers' cans are washed in the creamery before returning them to be refilled.

Location, Camden. James Daly, Owner and Manager, 1023 South Third-Street.—This is a one-story brick building, 33 x 20 feet, attached to dwelling. The floor is made of cement and has an iron sewer grating connected with the city sewer. At the time of inspection the family wash was being done by women, milk cans being used for the purpose of holding the wash-tubs. A door from this milkroom opens into the kitchen. The owner was notified of defects of construction and management.

# CUMBERLAND COUNTY.

Location, Bridgeton. Bridgeton Condensed Milk Co., Owners; Mr. Sharp, Manager.—A new building for handling milk, 60 x 60 feet, has been added to this plant during the year. The floors are all made of cement, and the rooms are equipped with modern machinery and apparatus. Twelve thousand quarts of milk a day are received, part of which is condensed, part shipped in cans, and in the summer time a part of it is manufactured into ice cream. The water-supply of their four driven wells has been examined and found to be uncontaminated.

Location, Bridgeton. Wills, Jones & McEwen Milk Co., Owners; John Dennis, Manager.—This is a two-story brick building attached to the rear of an artificial ice plant. The floors are made of cement. The milk cans, when received, are placed on a wood platform in the washroom. Repeated inspections made of these premises have shown the existence of very unsanitary conditions and inefficient management. The former owners, not being able to comply with the regulations of the board, sold out the business. The present owners have recently acquired the business, and the last inspection showed marked improvement in the sanitary conditions and in the equipment.

Location, Fairton. Estate J. P. Wetherill, Owners; W. S. Gandy, Manager.—This is a one-story brick building divided into three rooms, with an ice plant located in the cellar under the engine-room. Each room has a cement floor with sewer connections. All the doors and windows are fitted with copper wire fly screens. The side walls and ceilings are coated with white enamel. The water is supplied from a well, which is well protected against possible pollution. The product (400 quarts of milk daily) is made into butter and sold in Philadelphia.

#### ESSEX COUNTY.

Location, Caldwell. Harry F. Backus, Owner and Manager.—This is a one-story frame building divided into two rooms. The floor is partly cement and partly wood. Milk is stored in wood ice-water vats. The cement floor, at the time of inspection, was broken and waste fluids saturated the floor material. Milk is bottled in this creamery for delivery in Newark. The attention of the

owner was called to the defective floor, and it has since been repaired. The interior of the building has also been repainted.

Location, Irvington. W. L. Beardsley, Owner and Manager.—This is a one-story frame building, 25 x 40 feet. At the time of the first inspection and on several subsequent inspections the building was open and no one in charge was present. The cement floor was dirty and broken. The room contained a wood cooling vat in three compartments; one of the compartments contained several cans of cream which had spoiled, and they were infested with maggots. The vats were dirty, and the water in them was unclean. The owner of this creamery was refused license, and has now abandoned the creamery, conducting no business upon the premises.

Location, Newark. Seiler Brothers, Owners; Samuel Seiler, Manager.—This is a receiving station for the firm's Newark trade. Milk is brought from the railroad station and stored in concrete ice-water vats until delivered. The firm handle at this establishment 12,000 quarts of milk, 1,600 quarts of cream in cans and 600 quarts in bottles. The rooms all have fine cement floors, cement walls and an artificial ice plant. Surplus milk is churned. All waste fluids are discharged through iron outlets to the city sewer.

Location, Pine Brook. Halprin Brothers, Owners; Andrew Oria, Manager.—This creamery consists of a wooden shed of two rooms built on the end of an ice-house on the bank of the Rockaway river. A room, 10 x 10 feet, contains two ice-water vats. The walls, ceiling and floor were dirty, and cobwebs were hanging from the ceiling. The cans are washed in the adjoining room; this contains a small wood stove on which water is warmed for washing purposes. Water is supplied from the river for all purposes by means of a hand-pump. There are practically no adequate facilities in this establishment for properly handling milk, and the owners were so notified. They have discontinued receiving milk on these premises, and the building is now unoccupied.

# HUNTERDON COUNTY.

Location, Anwell. C. H. Cook, Owner; J. McLim, Manager.—This is a frame one-story building, having a good cement floor and smooth board side walls and ceilings. All waste fluids are discharged into a cesspool. Twenty farmers supply 800 quarts of milk daily, which is all skimmed and carted to Three Bridges and churned, or sold to ice cream makers. Milk is purchased on a butter-fat basis.

Location, Annandale. Marchant Brothers, Owners; Asa Parks, Manager.—This inspection showed that the floor, constructed of unjointed planks, leaks. The doors and windows are unscreened, and at the time of inspection the room was swarming with flies. A vat in this room was half full of decomposing milk, making the atmosphere of the room offensive. The owners were notified of the defects noted in this inspection.

Location, Baptistown. Owner, George H. Scott; Merritt Walker, Manager.— This creamery is still occupied by the manager and his family. Suit is now pending against the owner to recover the penalty of \$200 for the violation of the creamery act.



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Location, Barbertown. William Strause, Owner; Charles Marshall, Manager.—This is a one-story stone building. It has a cement floor, smooth plastered side walls and a smooth board ceiling. Twenty-five farmers supply 1,800 quarts of milk daily, which is all skimmed as soon as received, and the cream carted to Idell to be churned. At the time of inspection this place was clean and had the appearance of careful management.

Location, Bloomsbury. C. W. Vannatta, Owner; H. B. Pierson, Manager.—Fourteen farmers supply 500 quarts of milk daily, which is all carted to West Portal, three miles away, and churned. A new floor has been laid in this creamery and a drain trough under the floor has been cleaned as a result of notification by the board.

Location, Califon. I. H. Hoffman, Owner and Manager.—This is a two-story frame building. It has wood floors and smooth board side walls. The milk is cooled in wooden ice-water vats. There was an odor of decomposed milk noticeable throughout the rooms, and the owner was notified to make a more thorough daily cleaning.

Location, Califon. C. C. Demarest & Co., Owners; J. B. Geist, Manager.—
This is a frame structure with wood floors and unpainted smooth board side walls and ceilings. The floors slant to a sewer outlet, and the waste fluids are discharged into the north branch of the Raritan river. The receiving vat is located near a door opening onto the roadway, and the milk is exposed to dust and flies. The attention of the owners was called to these defects.

Location, Cherryville. Clinton R. Peterman, Owner and Manager.—This is a two-story frame building with basement. Milk is received in a room on the first floor, and flows by gravity through pipes to the basement, where it is churned. There is a cement floor in the churning-room and smooth board side walls. The family of the owner occupied the dwelling connected with this creamery, but vacated the rooms on receiving a notification from the board.

Location, Clinton. James Wyckoff, Owner and Manager.—Seventy-five cans of milk are daily received at this creamery, part of which is bottled, and all of which is shipped to dealers in New Jersey towns and to Brooklyn, N. Y. Since the last inspection a new earthenware drain-pipe has been laid in place of the old wooden drain, and the waste fluids are discharged in a field ditch 125 feet from the building; this distance should be increased. There are no screens in the doors or windows, and flies were very numerous in the rooms and in the milk. The attention of the owner was called to defects mentioned.

Location, Clover Hill. A. C. Durling, Owner; E. Williams, Manager.—This creamery was repaired, cleaned and painted last year. A new cement floor was also laid, and the drain extended 100 feet farther than formerly.

Location, Everittstown. George H. Scott, Owner; John R. Manning, Manager.—This is a one-story frame building, 15 x 30 feet; it has a cement floor and partly cemented side walls with smooth board ceiling. Three thousand pounds of milk are daily received, which is all separated, and the cream shipped to Philadelphia. The premises were clean at the time of the last inspection.

Location, Flemington. Seiler Brothers, Owners; C. H. Hauser, Manager.—This creamery building is frame, one-and-a-half-stories, with an icehouse annexed. The interior surfaces are smooth and painted. The receiving-room contains two wood wash-trays and a metal-lined bottling machine. One wash-tray is fitted with a revolving brush for washing bottles. Cans are washed in the other tray. After washing the cans are placed on a platform outside the building, and the bottles on racks in the creamery. Neither bottles nor cans are steamed. There are four wood ice-water cooling vats, which are emptied weekly. Water is obtained from a driven well 160 feet deep.

Location, Frenchtown. Harbison Dairy Co., Owners; Jos. Roberts, Manager.—Twenty-five farmers supply 1,800 quarts of milk a day, half of which is skimmed and it is all shipped to Philadelphia. The building is a one-story frame structure,  $100 \times 30$  feet. The main floor is six feet above ground, and is divided into three rooms. The main milkroom has a tight wood floor and smooth board side walls and ceilings, which are oiled. The waste fluids enter a tile drain brought up to the level of the floor and are discharged into the Delaware river. There is a twin wood wash-tray in the receiving-room fitted with water and steam pipes; the cans are washed in these vats, first in warm water with sal soda, then rinsed in warm water, after which they are steamed and inverted on racks against the wall. This is a shipping station for milk contained in cans only.

Location, Glen Gardner. John T. Force, Owner; J. T. Force, Manager.— This is a dilapidated one-story frame building, 36 x 16 feet, and is divided into two rooms. When the milk is received it is at once placed in a wood ice-water vat supplied with water from a hill spring. The washing of cans and bottles takes place in an adjoining room. This room contains a boiler, an ice cream machine and a wash-tray. The floors are made of wood and are old and broken. The wood floor drains are dirty and leaky, rendering the ground beneath the creamery offensive. The wood side walls are covered with felt paper with lath and are very dirty. There is no privy on the premises for the use of the employes, and the ground outside the creamery was strewn with fæcal matter. License was refused the owner of this creamery and it has been abandoned.

Location, Hoffmans. Isaac H. Hoffman, Owner; Manager, I. H. Hoffman.— This is a one-story frame structure, 20 x 25 feet, wood floors, side walls and ceiling. The walls and ceiling are painted white. Fourteen farmers supply 1,400 quarts of milk daily, which is shipped to Jersey City. Milk in cans is stored in wood ice-water vats and kept twelve hours before shipment. Cans and utensils are washed on an outside platform with water which is heated in an iron vessel over a stove. The waste fluids are discharged through a floor gutter into an earthenware tile pipe under the creamery floor, and enter the north branch of the Raritan river.

Location, Idell. William Strauss, Owner; William White, Manager.—This is a two-story frame building,  $28 \times 28$  feet. Milk, when received, is poured into a weigh can located on an elevated platform in the main room, from whence it flows by gravity through a three-inch in pipe to the receiving vat, and from thence through eleven feet of one-inch iron pipe with five elbows to warming pan. Ice is placed in the separated cream. The product is made into butter. The skim-milk vat and the ground surrounding it on the outside of the creamery is offensive to the sense of smell. The cement floor is broken and should be repaired. The waste fluids are discharged through an underground drain pipe into a creek. The owner was notified of the defects in this creamery and a subsequent visit showed that they had been given attention. The premises were in a better sanitary condition.

Location, Jutland. George N. Robinson, Owner; G. N. Robinson, Manager.—Twenty-eight farmers supply 1,100 quarts of milk daily to this creamery, 700 quarts of which is bottled, and it is all shipped to Jersey City. The building is a one-story frame structure with an oak wood floor and smooth board side walls and painted ceilings. The cooling vats are wood and are said to be emptied once a week and cleaned. An earthenware drain pipe carries the waste fluids to a brook 200 feet distant.

Location, Lebanon. George Clark, Owner; J. C. Stryker, Manager.—About 2,800 quarts of milk are received daily at this creamery, and it is all shipped in bottles and cans to Bayonne and Newark. Milk is cooled in spring water which passes through the creamery under the floor. The water-supply is derived from springs above the creamery, flowing through the creamery into a brook. Fish are kept in the cooling pools. A sample of water was taken from this creamery and reported to be suspicious.

Location, Little York. S. V. Eckel, Owner; G. S. Eckel, Manager.—Thirty-nine farmers supply 1,500 quarts of milk to this creamery daily. It is a three-story stone building on a side hill. Milk is received on the second floor and flows by gravity over open tin spouts to the floor below. The wall about the receiving can was found to be encrusted with stale milk. The walls were not clean, and the ceilings contained cobwebs and dust. The owner was notified of the unsanitary conditions in this creamery, and a subsequent visit showed that he had caused the walls and ceilings to be cleaned and painted.

Location, Locktown. Locktown Dairymen's Association, Owners; G. W. Hockenbury, Manager.—This is a three-story frame building with family apartments. The family vacated the building after receiving notice from the board. The wall surrounding the receiving tank was encrusted with dried decomposed milk. The owners were notified to clean the walls, and a subsequent visit showed that the interior had been thoroughly cleaned and painted.

Location, Ludlow. Owner, Henry Quell; Manager, George Sidney.—This is a one-story frame building with wood floors, side walls and ceiling. The water is obtained from a spring twenty feet in the rear of the building and is conveyed to the creamery through an iron pipe by gravity. The waste fluids are discharged into a swift running brook five feet in the rear of the creamery.

Location, Milford. C. E. Hurley, Owner; C. E. Hurley, Manager.—This is a one-story frame building, 24 x 50 feet, with a cement floor and smooth board unpainted side walls and ceilings. The one room contains wood cooling vats, churn, pasteurizer, &c. The product is made into butter. The odor of the room was not good, and the owner was requested to clean thoroughly. On the next inspection no objectionable odor was noticed.

Location, Mt. Pleasant. George H. Scott, Owner; G. H. Scott, Manager.— This is a small receiving station. Three thousand pounds of milk are daily received. It is separated as soon as received and the cream shipped to the Crane Ice Cream Co., of Philadelphia. The station has a cement floor.

Location, New Germantown. A. C. Durling, Owner; William Scherman, Manager.—This a two-story frame building with icehouse annexed. The second floor is not in use. The cooling room, 10 x 30 feet, contains two wood cooling vats. It has wood floors, and the interior has been recently painted. Water for washing utensils is heated in an iron vessel with tin box beneath it. The floor leaked, but has since been repaired.

Location, Oak Grove. C. R. Peterman, Owner; Sedgwick Gano, Manager.—Two thousand five hundred quarts of milk are supplied by thirty-eight farmers to this creamery. The milk is received from a window and passed into a weigh can located on a platform in the milkroom. This room is 25 x 20 feet. A driven well 128 feet deep is located under a shed next to the creamery. A cellar, 10 x 20 feet, under the above-mentioned platform was flooded with waste fluids from the creamery floors at the time of inspection. The ledges and side walls back of the cream vat were covered with cobwebs and dust, and when the lid was raised they were liable to fall into the milk. Since the above inspection this creamery has been entirely renovated. A cement floor has been laid, the cellar filled up and the interior cleaned and painted.

Location, Oak Summit. Harry Sassaman, Owner; H. S. Smith, Manager.—This is a two-story frame building with dwelling apartments. It has cement floors in the milkrooms, smooth board ceiling and smooth plastered side walls. After receiving notice from the board the manager's family vacated the dwelling-room.

Location, Pattenburg. George N. Robinson, Owner; William Atkins, Manager.—Seven hundred quarts of milk are received daily, which is all shipped to Newark, Jersey City and Perth Amboy the same day. Water is obtained from a driven well eighty feet deep. All waste fluids are discharged through wood troughs under the creamery floor onto sloping ground outside the creamery, then entering a swift running stream twenty feet away.

Location, Pittstown. Empire State Dairy Co., Owners; A. Brice, Manager.—This is a two-story frame building with dwelling-rooms on second story. Fifty farmers supply 2,500 quarts of milk daily, which is all shipped to Brooklyn.

The floors are made of wood and are tight. The side walls and ceiling surfaces are smooth. The milk is received from an outside platform and poured into a twin metal-lined vat in the cooling-room. During the process the milk is exposed to flies and dust. The waste fluids are discharged through an earthenware pipe to a creek. After a notification from the board the dwelling-rooms were vacated.

Location, Reaville. Farmers' Exchange Co., Owners; J. T. Runy, Manager.
—Forty-eight farmers supply 2,500 quarts of milk daily to this creamery, part of which is made into butter and part skimmed. The cream is shipped to Philadelphia. All waste fluids are discharged through a drain pipe 300 feet from the creamery. All doors and windows are screened. Water is obtained from a well 235 feet deep.

Location, Readington. Farmers' Exchange Co., Owners; F. A. Peabody, Manager.—This is a two-story frame building with tin roof, cement floor, smooth side walls and ceilings. Water is obtained from a driven well eighty-five feet deep under the boiler-room. Waste fluids are discharged through an underground earthenware pipe to the south branch of the Raritan river. The milk, while in the receiving vats, is exposed to flies, and many were found floating in them.

Location, Ringoes. William Strauss, Owner; Frank Miller, Manager.—The side walls in the main room have been recently lime-washed, but the floors were dirty. The wood floors and side walls of the receiving-room were also unclean. The skim-milk vat on the outside of the building is filled with decomposed milk. The drain from this vat is clogged and causes a nuisance to exist on the ground surrounding it. There are no screens in the doors and windows, and the milk-rooms were infested with flies. The owner was notified to abate the nuisances existing on the premises.

Location, Ringoes. Harbison Dairy Co., Owners; S. Burns, Manager.—This is a new frame structure, 30 x 100 feet. The floors are wood and are tight. The surfaces of the side walls and ceilings are smooth. The cooling-room contains four metal cooling vats. One thousand quarts of milk are received daily, which is all shipped to Philadelphia the same day in cans.

Location, Rosemont. William Strauss, Owner; George Wilson, Manager.—Twenty-seven farmers supply 1,200 quarts of milk daily, which is all skimmed and the cream carted to the owner's creamery at Sergeantsville, where it is made into butter. This creamery has a good cement floor and smooth plastered side walls, lime-washed, and smooth board ceiling. The skim-milk vat in the creamery was infested with flies. There are no screens in the doors nor windows.

Location, Sergeantsville. William Strauss, Owner; William Johnson, Manager.—Ninety farmers supply 4,000 quarts of milk daily, which is all made into butter. The side walls and ceiling of the weighroom are unclean and the wood floors were found to be leaky. The skim-milk vat in the main room containing decomposed milk is infested with flies. This owner was notified of the above defects and new floors were laid, and the interior of the creamery cleaned and painted.

Location, Spring Mills. T. M. Mayer, Owner; George Scheltz, Manager.— This creamery, at the time of the first inspection, was in a deplorable condition as regards floors, drainage, light and general sanitation. After receiving notice from the board it was entirely reconstructed and equipped with modern machinery. The interior was neatly painted. Under proper management and a better protection against flies milk can now be handled with safety.

Location, Stockton. Horace Allen, Owner; Horace Allen, Manager.—This creamery was abandoned during the year.

Location, Sunnyside. James Wyckoff, Owner; J. D. Compton, Manager.—After several inspections of this creamery the drainage system has been changed, the well cleaned and a grocery store attachment abandoned. The rooms have all been cleaned and painted. Forty-five cans of milk, supplied from twenty-seven farmers, are shipped to Bayonne, Elizabeth and Newark.

Location, Three Bridges. Anwell Valley Dairy Co., Owners; W. J. Willsey, Manager.—This is a two-story frame building, interior painted, oak floor and smooth board side walls and ceiling. Thirty-two persons supply 1,400 quarts of milk daily, which is shipped to Newark, Elizabeth and Perth Amboy. A pig-pen 100 feet from the creamery has been removed after a notification from the board.

Location, Wertsville. Hernig & Northrup, Owners; William Boyd, Manager.—This is a one-story frame building, 25 x 27 feet. The wood floors were found to be leaky, and the drainage from the creamery and the contents of a privy are exposed to view fifty feet from the creamery. The building is unscreened and was infested with flies. The attention of the owners was called to the above-stated conditions, and since that time they have constructed a new cement floor, new cement cooling vats and new smooth board side walls and ceilings. They have also fitted all doors and windows with screens and cleaned the ground on the exterior of the building.

Location, West Portal. C. W. Vannatta, Owner and Manager.—Thirty-four farmers supply 1,800 quarts of milk to this creamery, 1,500 quarts of which are bottled. It is all shipped to Jersey City and Perth Amboy. The bottling of milk is done in the washroom. The wood frame of the bottling machine is saturated with milk, and all the overflow from bottles is caught in a vessel and then rebottled. The wood cooling vats are emptied and refilled every week.

Location, White House. A. C. Durling, Owner; William Schaffer, Manager.—Twenty-five farmers supply 2,500 quarts of milk daily to this creamery, which is shipped to Newark and New York. This creamery has undergone radical changes in repairs and equipment. The original wood floors have been replaced with concrete ones. The filthy cellar has been cleaned. The drainage pipes have been relaid and extended 600 feet from the creamery. The interior surfaces have been neatly painted and new cement cooling vats built. A new pasteurizer and other utensils have been added to the equipment. This is the result of several notices from the board.

#### MERCER COUNTY.

Location, Harbourton. Samuel Burns, Owner and Manager.—This is a butter creamery, 26 x 38 feet, and two stories high. Thirty-four farmers supply 4,300 pounds of milk daily. The milk is received from a porch on elevated ground and poured in a weigh can, flowing by gravity to the room below into receiving vats. The floors are made of cement. The side walls are lime-washed and the ceiling surface smooth. The waste fluids are discharged into an open ditch forty feet from the creamery, extending under an open privy, the contents of which are exposed. This condition, together with the disposal of drainage at this point, renders the air foul and is a source of fly breeding. Since the inspection recorded above the drainage disposal point has been extended fifty feet and the privy cleaned and enclosed.

Location, Hopewell. Henry A. Northrup, Owner; D. A. Northrup, Manager.—After repeated inspections of this creamery the plant has been largely improved. The cellar, which formerly was flooded with waste fluids from the leaky wood floor of the milkroom, has been filled up with earth, and new concrete floors have taken the place of the old wood ones. New concrete cooling vats have been built and smooth interior surfaces have replaced the old rough ones. The interior has also been painted. The drainage system has been changed and is discharged into a stream which runs through the village. It was formerly discharged into the ice pond. The sloping ground surrounding the ice pond has been cleared of pig-pen, privy and other contaminating sources.

Location, Pennington. J. A. Kunkle, Owner.—This is a private creamery operated by the owner. It is a stone building, 18 x 36 feet, with cement floors and smooth surface walls. Milk from the owner's dairy is pasteurized and shipped to Philadelphia.

Location, Robbinsville. Owner, B. F. Hulse; Manager, George F. Robbins.—This is a one-story frame building. Twenty farmers supply 1,000 quarts of milk daily, which is all carted to Trenton and sold to dealers. After repeated visits to this creamery, and notices from the board, the broken cement floor has been repaired and the drain pipe cleaned. The disposal point of the drainage on land 200 feet from the creamery has been cleaned. The interior has also been cleaned, and on the last visit it was said the skim milk, which has been a source of foulness in the creamery-room, is not used.

#### MIDDLESEX COUNTY.

Location, Cranbury. Cook & Jones, Owners; Chester A. Bastress, Manager.—This is a one-story frame building, 30 x 40 feet. Sixty-five farmers supply 2,000 quarts of milk, all of which is made into butter. The floors are cement, and all interior surfaces are smooth. Water is obtained from a dug well outside the building. Waste fluids are discharged through a four-inch earthenware pipe into Cranbury lake, fifty feet from the creamery. The milk and cream vats were uncovered, and, being located under a line of shafting, were liable to receive particles of dust while the machinery is in motion. The owners were requested by the board to remedy this defect, and accordingly have had covers attached to the vats.

Location, Highland Park. W. W. Ten Eyck, Owner and Manager.—This is a one-story frame and stone basement building 20 x 30 feet, with 12 x 30 foot extension. Sixteen farmers supply 1,000 quarts of milk daily, which is sold in New Brunswick and Highland Park. Milk in farmers' cans is set in cement ice-water vats until delivered to customers. The floors are made of cement, and the interior surfaces are smooth.

Location, New Brunswick. New Brunswick Hygienic Milk Co., Owners; Alva T. Jordan, Manager.—This creamery is located on Church street, and the milk, while being received and exposed in vats, is liable to contamination from dust and other impurities from the street and driveway. The board refused to license the place until proper changes had taken place. The owner finally acquired additional room, and has built an entirely new structure, equipped with mechanical refrigeration, new modern apparatus, and arranged to receive milk where it will be better protected against the defilement to which it was formerly subjected.

Location, Three Mile Run. A. De Hart Voorhees, Owner; E. McLaughlin, Manager.—This creamery is located on the farm of the owner, and the milk product of his own farm and that of two of his neighbors is skimmed, and the cream sold to consumers in New Brunswick. The sanitary conditions are excellent, and unusual care is taken with the product to protect it from contamination.

# MONMOUTH COUNTY.

Location, Allentown. Allentown Dairy Association, Owners; A. A. Taylor, Manager.—This is a three-story building on a side hill. The milk is received on the second floor, and is discharged from weigh can through open conductors to a vat on the lower floor. Thirty-six farmers supply 1,500 quarts of milk daily. In the summer time the milk is shipped to Asbury Park and Spring Lake, and in the winter it is made into butter. The floors are cement, and milk is cooled in cement ice-water vats. Water is supplied from a dug well. Waste fluids are discharged through an earthenware drain pipe brought up to the level of the floor, into Doctor's creek, twenty feet from the creamery.

Location, Colt's Neck. Colt's Neck Creamery Co., Owners; F. A. Tupper, Manager.—Nineteen farmers supply 1,200 quarts of milk daily to this creamery. Milk is received from the roadway, taken to a room, 10 x 10 feet, in the second story, and poured into a weigh can from whence it is discharged through a fence to a vat on the basement floor. The milk is cooled and stored in wood ice-water vats. The floor of the main room is cemented, and the side walls and ceilings have smooth boards, lime-washed. Water is supplied from a well 166 feet deep. Milk is carted to Asbury Park and retailed.

#### MORRIS COUNTY.

Location, Chester. Keystone Dairy Co., Owners; E Skellenger, Manager.—This is a receiving station. Thirty cans of milk are daily received, cooled and stored in wood ice-water vats until shipping time. The wood floors are water soaked and leaky. The interior of the rooms were unclean, and an odor of decomposed milk permeated them. The owners were notified by the board to remedy the defects reported.

Location, Flanders. Willswood Farm Dairy Co., Owners; V. M. Prescott, Manager.—This is a two-story frame building. An elevated wagon road permits the milk to be received on the second floor. The receiving-room has a cement floor, and the wall surfaces are smooth, and are coated with white paint. Milk is discharged from this room over tin troughs to a vat on the first floor. This vat is elevated six feet above the cement floor of the churning-room. The bottling room has a cement floor and white enameled walls. Milk is received in this room by gravity over tin spouts from the churning-room to the reservoir of a metal bottling machine. The rooms are well ventilated, and were clean at the time of inspection. Water is supplied by a swiftly-running stream. Waste fluids are discharged into a brook below the creamery. Milk is sold in Philadelphia.

Location, Flanders. Henry Quell, Owner; Wm. McLaughlin, Manager.—This is a dilapidated frame building. The wood floors are old and leaky. The space under the platform, where cans are racked, is soaked with waste water, and is unclean. There is no protection against flies which swarm in the creamery. One thousand two hundred quarts of milk are received, which is shipped to the owner in Long Island City. The owner was notified by the board of the defects reported, and has promised to rectify them.

Location, German Valley. J. T. Welch, Owner; Jacob Welch, Manager.—This is a one-story frame building. Ten farmers supply 400 quarts of milk daily, the milk in cans being set in a spring and kept there until shipping time, then sent to New York. The washing of cans is done in a separate building on the premises.

Location, German Valley. S. M. Dilts, Owner and Manager.—This is a small creamery, 12 x 30 feet, divided into three rooms. Two farmers and the owner's dairy supply 300 quarts of milk a day, which is shipped to Plainfield. The interior of these rooms contained accumulations of dust, cobwebs, &c., on the walls. All waste fluids were discharged into a cesspool under the floor. The family wash was being done in one room at the time of inspection. After a notice from the board the drainage was changed, and waste is now discharged into a cesspool 100 feet from the creamery. The cook stove has been removed. A cement floor has been laid, and the interior surfaces sheathed with smooth boards and painted.

Location, Middle Valley. Geo. Clark and Son, Owners; Wm. Maxwell, Manager.—Thirty farmers supply 1,600 quarts of milk to this creamery. The wood floors are leaky, and the side walls and ceilings are unclean. The ground space in the rear of creamery contains an accumulation of ashes and garbage, and the ground surrounding it is saturated with decomposed milk. After a notice from the board, a new floor was laid. The side walls and ceiling were cleaned and painted, and the drain and ground surface cleaned.

Location, Morristown. Luther Kountz, Owner; J. C. Hubert, Manager.—This is a one-story brick building divided into four rooms. The floors are concrete, smooth and perfect. The side walls are wainscoted with porcelain tiles, and the ceilings are made of narrow wood boards shellacked. Waste fluids are discharged from the soapstone wash trays through tight trapped pipes to main sewer pipe, and the floor drainage goes through brass floor gratings. A cesspool 400 feet away receives all drainage. Water is obtained from a hill spring 3,000

feet from the creamery. All doors and windows are screened. The milk is produced on owner's farm, made into butter and sold in Morristown.

Location, Naughright. Henry Quell, Owner; John Halsthen, Manager.—This is a four-room frame building. Eleven persons supply 900 quarts of milk daily, which is all bottled and shipped to the owner at Long Island City. A new wash-room has been added to the building since the first inspection.

Location, Troy Hills. H. F. Backes, Owner and Manager.—Five farmers supply 350 quarts of milk at this station, and place the cans in a spring which is covered by a shed. It is located alongside of an icehouse, and ice is placed in the spring. The milk is kept there over night, and is then carted to Caldwell, six miles away.

#### SALEM COUNTY.

Location, Alloway. F. A. Shiveler, Owner and Manager.—Twenty-eight farmers supply 1,800 quarts of milk daily to this creamery. Part of the product is made into ice cream, and the balance is shipped to Millville and Philadelphia. The water in the wood cooling vats was dirty and offensive to the sense of smell at the time of inspection. A notice from the board brought a promise from the owner that more care would be exercised in the future in keeping the vats, and water in them, clean.

Location, Daretown. Ira S. Champion, Owner and Manager.—Eight hundred quarts of milk are received at this creamery, which is all shipped to the owner at Ocean City. Milk is cooled in a natural spring. Water for washing utensils is obtained from a driven well fourteen feet deep. Cans, after washing, are inverted over a steam jet. The floors are wood. This place was clean inside at the time of inspection.

Location, Elmer. C. H. Oliphant, Owner; Edw. Cole, Manager.—This creamery has been entirely reconstructed since first inspected. The board refused to license under former conditions. The old basement has been filled up. New concrete floors have been laid throughout, and new modern apparatus has been installed.

Location, Elmer. Isaac B. Reeve, Owner; J. B. Reeve, Manager.—This is a two-story frame building. One thousand five hundred quarts of milk are received daily, which is all made into butter. There is no protection against flies entering the creamery, and the wood floors are saturated with decomposed waste fluids. The family wash was formerly done in the milk room. The owner was notified of the defective conditions.

Location, Monroeville. Monroeville Ice Cream Co., Owners; Oscar Ware, Manager.—After several notifications from the board, this creamery has been placed in a better sanitary condition than when first inspected. A pig pen near the building has been removed, and drainage system improved, and the interior made cleaner. A slaughter-house adjoins the creamery, and part of the building is used for a cold storage room for meat.

Location, Harmersville. J. T. Davis, Owner; Quinton Rankins, Manager.— This is a one-story rough board structure, 16 x 22 feet, with wood floor. Thirtythree farmers supply 1,500 quarts of milk, which is all skimmed, and the cream carted eight miles to Salem. The wood cooling vats were not clean. When necessary to empty the vats the water is discharged on the floor, and escapes through holes in the floor. The ground beneath is covered with a filthy accumulation from this source of thirteen years' standing. After notice from the board the space under the creamery was cleaned, a new cement floor laid, and new smooth interior surfaces made.

Location, Salem. Bridgeton Condensed Milk Co., Owners; Jos. Sharp, Manager.—This is a new structure of brick, 72 x 130 feet, and is equipped with new modern machinery for handling and condensing milk. Five thousand quarts of milk are received. All floors are made of cement. Waste fluids are discharged into the city sewer. The water-supply is obtained from driven wells 100 feet deep.

Location, Salem. J. T. Davis, Owner and Manager.—Three thousand quarts of milk are handled daily in this creamery, part of which is sold in Salem and Philadelphia, and made into ice cream. The floor and cooling vats are made of cement. Milk is pasteurized.

Location, Sharptown. Wm. Richman, Owner and Manager.—This is a new modernly-equipped creamery and takes the place of a badly-located and badly-managed one in the same village. The site is new and on high ground. The floors are all cement; the rooms are large, light and well ventilated. Forty-eight farmers supply 3,000 quarts of milk daily. Part of it is condensed, and part sold to Atlantic City. In the summer time ice cream is manufactured.

Location, Salem. Wm. Richman, Owner and Manager.—This creamery has not been licensed. Several notices from the board have not as yet had the desired effect of improving the unsanitary conditions existing. The fault lies chiefly in the management. The interior surfaces are dirty. The vats are unclean, and the employes are clad in unclean outer garments.

Location, Woodstown. C. F. Moore, Owner and Manager.—This creamery has undergone many desirable changes. The rooms have been enlarged, affording more light and ventilation. A new cement floor has been laid. New interior smooth surfaces have replaced the old ones. The drainage system has been changed, and a receiving-room installed in the second story of the building, allowing the milk to flow by gravity to the milk room.

Location, Woodstown. Buzby & Miller, Owners and Managers.—This creamery has not been licensed. A filthy skim milk vat is located twelve feet from the receiving-room, and the ground surrounding it is saturated with decomposed milk. Flies swarm about the place, and get into the milk in the weigh can. The interior walls have been cleaned, and the cement floor has been repaired.

# SOMERSET COUNTY.

Location, Belle Mead. C. H. Cook, Owner; Robert Gates, Manager.—This creamery building adjoins large cow barns on a 1,000 acre farm. The product of the home dairy is 2,000 quarts of milk, besides which 2,000 quarts are pur-

chased from farmers. The product is made into butter or skimmed, and the cream shipped. The floors are cement, as well as the cooling vats which are covered.

Location, Blackwell's Mills. Hamilton Dairy Co., Owners; Fred. Morganbrook, Manager.—This creamery was refused license by the board on account of the unsanitary condition of the premises, and the inadequate facilities for handling milk. The creamery has been abandoned.

Location, Flagtown. Sam Levy, Owner; Phil. Grossweiler, Manager.—Forty farmers supply 1,000 quarts of milk, which is shipped to the owner in New York. The wood floors in this creamery are made of unjointed planks; they are defective and leak. The wood platform on the outside of the creamery leaks and conceals accumulations of filth. After notification from the board, a new cement floor is being laid. The exterior is being cleaned and the drainage system changed. No license has yet been granted to this creamery.

Location, Liberty Corner. Seiler Bros., Owners; John Gratton, Manager.—This is a three-room frame building located on the owners' farm. Twenty-one cans of milk are shipped to Orange and Chatham. Water is obtained from a spring, and the overflow from this spring goes into a box, 6 x 5 feet, used to cool milk. The floors are wood and leak. Cans are inverted over a steam jet after washing and treated to live steam.

Location, Lyons. Luther Childs, Owner and Manager.—This creamery is located in one end of a large barn and wagon house. The floors throughout are cemented. The cooling vats are concrete. The milk is supplied to Childs' restaurants.

Location, Montgomery. Farmers' Exchange Co., Owners; A. Shiner, Manager.—This is a one-story building, 20 x 38 feet. 'Twenty farmers supply 1,000 quarts of milk. Pumps and small bore pipes are used to transfer milk. The floor is cement. The water is obtained from a driven well seventy-five feet deep.

Location, Neshanic. Wm. Rausch, Owner; J. M. Agans, Manager.—Sixteen farmers supply 1,600 quarts of milk to this creamery. Water is obtained from a well in the engine-room, 112 feet deep. Farmers' cans are washed before being returned. The floors and cooling vats are wood. The interior surfaces are smooth.

Location, Neshanic. E. Dennis, Owner; John Foose, Manager.—This creamery has been much improved in condition and management during the year. A new concrete floor has been laid in the wash room, the side walls have been cleaned and painted, the ground space under the wash room floor has been cleaned, and the drainage system extended to a greater distance. A new well has also been dug, and it is well protected against surface pollution.

Location, North Branch. Geo. W. Fields, Owner and Manager.—Eighty cans of milk are handled daily in this creamery, and it is all bottled and shipped to Bayonne. The skim milk vat which was reported as constituting a nuisance has been removed, and the ground on which it stood has been cleaned and covered with dry ashes.

Location, Pottersville. A. C. Durling, Owner; Wm. Walker, Manager.—Twenty-three farmers supply 1,200 quarts of milk daily, which is shipped to Newark. This creamery has a new plank floor. The cooling vats are wood. Water is obtained from a raceway near the creamery.

Location, Skillman. J. B. Longshore, Owner; A. Smith, Manager.—This is a frame building. One thousand four hundred quarts of milk are taken in daily. It is stored in wood vats and shipped to Philadelphia the same day. Water is obtained from a driven well under the engine-room floor.

Location, South Branch. Farmers' Exchange Co., Owners; A. M. Miller, Manager.—Twenty-one farmers supply 1,400 quarts of milk daily to this creamery. The floors are cement, and the interior surfaces are smooth, and have been recently painted. Doors and windows are screened.

#### SUSSEX COUNTY.

Location, Andover. Fulboam Dairy Co., Owners; Harvey Morris, Manager.—This is a two-story frame building. The floor is cement, and the receiving-room on the second floor is wood. The water-supply is obtained from a raceway. The ground on one side is high, and privies, chicken houses, &c., are located on it. The water was found to be polluted, and the owners notified.

Location, Augusta. T. O. Smith's Sons, Owners; Theo. Cross, Manager.—Seven thousand quarts of milk are handled daily in this creamery. The milk room has a board floor, and the cooling vats are wood. After a notice from the board a new source of water-supply was obtained, and the ground space under the creamery cleaned and cemented.

Location, Balcville. Alex. Campbell Milk Co., Owners; S. Black, Manager.— This is a one-story building with cement floor. Water is obtained from a driven well forty feet deep. Three thousand four hundred quarts of milk are handled daily, which is all shipped to the owners in Brooklyn.

Location, Beemerville. Borden Condensed Milk Co., Owners; W. F. Dye, Manager.—This is a receiving station for this company. The milk is hauled to the Branchville Creamery daily. The floors are cement, and the interior surfaces are smooth and painted white.

Location, Branchville. Borden Condensed Milk Co., Owners; W. F. Dye, Manager.—This is a new building, taking the place of an old one. It is large, well lighted and ventilated, has cement floors and smooth surfaces. It is equipped with all modern machinery. The water is obtained from a dug well fifteen feet deep.

Location, Clove. S. C. Hayne, Owner; Jos. Van Syckle, Manager.—This is a receiving station. The milk, when received, is placed in a spring for two or three hours, then carted about six miles to Unionville, N. Y. New floors are being laid in the wash room, and a new source of water-supply will be obtained as required by the board.

Location, Glenwood. Brown & Bailey, Owners; Geo. L. Howell, Manager.—One hundred and two cans of milk are handled daily in this creamery. It is all condensed and sold in Newark and Jersey City. Since the last inspection, a new cement floor has been laid. The water for cooling purposes is obtained from a hill spring, and for washing purposes, from Carpenter's pond.

Location, Hamburg. Diamond Dairy Co., Owners; Frank Scott, Manager.—Twenty-five farmers supply 6,000 quarts of milk daily. New cement floors and cement cooling vats have been constructed as a result of notification by the board.

Location, Huntsville. Borden Condensed Milk Co., Owners; J. W. Winters, Manager.—Two thousand quarts of milk are handled daily. It is all bottled and shipped to New York. A new receiving-room is in course of construction. When it is completed the milk, as received, will flow by gravity direct to the bottling machine. Iron sterilizing chambers are used to sterilize all bottles and utensils. A sample of the water from a well was taken for analysis.

Location, Lafayette. Newark Milk and Cream Co., Owners; Wm. Lloyd, Manager.—This is a two-story building, with cement floors and smooth interior surfaces throughout. Flies were found in milk in the reservoir of bottling machine. A milk car is always on the track, and milk, as soon as bottled, is iced and placed in it. The ground surface under the car and surrounding it was saturated with decomposed milk. The company was notified of these defects, and as a result the milk vessels are being kept covered, and the ground on the outside of the creamery cleaned and disinfected.

Location, McAfee. H. S. Chardavoyne, Owner; A. C. Ward, Manager.—The wood floor in this creamery is broken, and the waste fluids escape to the ground beneath, foul odors emanating from this source. The water-supply is taken in the winter time from Black creek, a pond alongside the creamery. This water was found to be polluted. The board notified the owner of the pollution of the pond water, and prohibited its future use. The floors have not as yet been repaired.

Location, Monroe. Fulboam Dairy Co., Owners; Wm. Smith, Manager.—This is a frame structure with wood floors. The floor drains and trough are constructed of wood and are tight. The employes were found filling bottles by dipping them in a can with the hands. A notification from the board caused a change in the system of bottling.

Location, Monroe. Newark Milk and Cream Co., Owners; E. Gould, Manager.—A new wood floor was laid in this creamery and the drain extended sixty feet to a cesspool in a field. The interior surfaces have been painted.

Location, Newton. Dairy Products Co., Owners; Wm. Campbell, Manager.—This building is so constructed that the milk taken in at the receiving-room flows by gravity to coolers, bottling machine and storage vessels. All the floors are of cement, and the wall surfaces are smooth. Water is obtained from the Newton borough supply. All waste fluids enter the borough sewer. Forty farmers supply 8,000 quarts of milk daily.

Location, Papakating. Borden Condensed Milk Co., Owners; M. L. Derno, Manager.—This is a frame building, 40 by 228 feet, situated on a side hill. Milk flows by gravity to coolers and bottling machine. All the interior surfaces are smooth and painted white. The floors are cement. All bottles are placed in tight iron trucks after washing, and treated with live steam for fifteen minutes. All bottles, after filling, are packed in ice and stored in a milk car, which is always standing on the railroad siding.

Location, Price's Crossing. Orange Milk Association, Owners; William Leaguire, Manager.—Three thousand quarts of milk are handled daily in this creamery, and it is all bottled and shipped to New York. The floors are cement and the side walls are smooth. The leaky floor in the receiving-room was repaired after notice from the board.

Location, Mulfords. Sandford Dairy Co., Owners; G. McPeak, Manager.— Twenty-three farmers supply 2,300 quarts of milk, which is all shipped to New York. The manager and his family occupied dwelling rooms in this creamery, but on notification from the board the rooms were vacated.

Location, Quarryville. H. S. Pound, Owner; Fred. T. Clark, Manager.—These premises occupy a space 30 by 50 feet, having a wood floor which is broken. The manager vacated the living rooms on the second floor after a notification by the board.

Location, Roy's Crossing. Fulboam Dairy Co., Owners; William Fulboam, Manager.—Sixty farmers supply 6,000 quarts of milk a day to this creamery. The building was found to be unclean inside, and the waste fluids were discharged upon the ground. A family occupied dwelling rooms in the creamery. After notification by the board the interior of the creamery was cleaned and painted. The drainage system was satisfactorily reconstructed and the family removed from the creamery.

Location, Sparta. George Ihnken, Owner; E. Dennis, Manager.—This building was destroyed by fire in September, 1907, and a new building is now in course of construction.

Location, Stillwater. McDermott Dairy Co., Owners; J. B. Wildrick, Manager.—This creamery has undergone a general reconstruction. The interior has been thoroughly cleaned and neatly painted. Light and ventilation are ample. The cooling tanks are made of cement. Thirty-five farmers supply ninety cans of milk.

Location, Stockholm. George Ihnken, Owner; B. H. Dennis, Manager.—This creamery has been in poor sanitary condition. The waste fluids were discharged through a wood trough and fell upon the ground underneath the floor. The cooling vats and the side walls were found to be dirty. Notice from the board resulted in cleaning the ground underneath the creamery and covering it with dry ashes. A new drain pipe was laid to a cesspool behind the creamery building.

Location, Sussex. Beakes Dairy Co., Owners; A. C. Williams, Manager.—Thirty-five farmers supply 6,000 quarts of milk daily, which is all shipped to New York. This creamery was formerly occupied by the manager's family.

The drainage and the floors were defective and a privy on the premises was offensive. Since notification by the board new cement floors have been laid, the family removed from the building, the privy emptied and the drainage pipes changed.

Location, Sussex. Horton & Lewis, Owners; E. Lewis, Manager.—This is a two-story brick structure, with cement floors throughout. About 25,000 quarts of milk are handled daily, part of which is skimmed and part condensed. The light and ventilation are ample and the drainage system complete. Water is obtained from the borough supply.

Location, Sussex. Dennis Reardon, Owner; Thomas Hulse, Manager.—This is a three-story structure, 25 by 65 feet. When first visited the wood floors leaked, the space under the creamery was strewn with fæcal matter and was in a deplorable condition. After notification from the board a new cement floor was laid, and the space under the rear room floor cleaned and covered with dry earth. The manager's family formerly occupied the dwelling part of the creamery, but they have now removed.

Location, Swartswood. George Lodes, Owner; Floyd Casterlin, Manager.—Eighteen farmers supply 1,200 quarts of milk daily, which is all bottled and shipped to the owner in Brooklyn. The floors and cooling vats are made of wood. The water in the cooling vats was clean at the time of the inspection. Water is obtained from the railroad storage tank. The manager and his family vacated these premises after notification by the board.

Location, Verona. Robinson & Hawkins, Owners; Thomas Hunt, Manager.—Fifteen farmers supply sixty-five cans of milk, which is shipped to Brooklyn. A number of improvements have been made in this creamery. The wood floors and cooling vats have been replaced with cement ones. The drainage was formerly discharged into a gutter twenty-five feet from the creamery. It is now carried to a distance of 500 feet. The interior surfaces have been made smooth and painted.

Location, Woodruff Gap. H. S. Chardavoyne, Owner; C. H. Green, Manager.
—About 2,000 quarts of milk are received daily, which is all shipped to the owner in Brooklyn. A leaky floor in this creamery has been repaired. The stone floor in the milkroom is uneven and loose jointed. The side walls need painting.

Location, Warbasse. Henry Tepperwin, Owner; E. C. Benedict, Manager.—This is a shipping station on the N. Y., S. and W. R. R., having wood floors and wood cooling vats. The manager and his wife still occupy dwelling-rooms in this creamery. The board has authorized a suit to be brought for the violation of the law.

#### WARREN COUNTY.

Location, Allamuchy. Halprin Brothers, Owners; John Deremer, Manager.—Nineteen hundred quarts of milk are supplied by fifteen farmers. The board served several notices on the owners of this creamery to correct conditions which were in violation of the law. As a result the manager and his family have vacated the dwelling-rooms. The drainage system has been changed, the interior cleaned and the doors and windows screened.

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Location, Blairstown. Empire State Dairy Co., Owners; Charles Annis, Manager.—Forty-five farmers supply eighty cans of milk, which is all shipped to the owners in Brooklyn. Many changes and repairs have been made in this creamery as a result of notices sent by the board. The walls and ceilings have been painted, also the water and steam pipes. The milkroom and washroom have been separated and the family apartments have been vacated.

Location, Bridgeville. Henry Rauch, Owner; George Garner, Manager.—This is a new one-story frame structure on the Delaware, Lackawanna and Western railroad. The waste fluids from the floors were discharged on the ground underneath the creamery and created a nuisance. This defect was corrected by laying 150 feet of earthenware drain pipe, connecting them with the floors and discharging the waste fluids into a cesspool. Thirty farmers supply 1,600 quarts of milk, which is all shipped to the owner in Brooklyn.

Location, Broadway. Broadway Creamery Co., Owners; Blaine Hixon, Manager.—Fifteen farmers supply 800 quarts of milk, which is all shipped to Newark. The interior surfaces of this creamery have all been cleaned and painted white. The floor is made of cement, and the cooling vats of wood. Water is obtained from a hill spring 200 yards from the creamery.

Location, Changewater. Taylor-Plate Milk Co., Owners; Howard Castener, Manager.—Nineteen farmers supply 2,000 quarts of milk daily, which is all bottled and shipped to the owners in Brooklyn. Employes are required to attire themselves in clean outer garments three times a week. The floors are cement and the interior surfaces are smooth. Water is supplied from a hill spring one mile from the creamery.

Location, Delaware. F. W. Jansen, Owner; W. D. Christian, Manager.— Twenty-six farmers supply 1,200 quarts of milk daily, which is all shipped to the owner in Hoboken. The family wash, which was formerly done in the creamery, has been discontinued after receiving a notice from the board on the subject.

Location, Great Meadows. Sandford Dairy Co., Owners; P. N. Welch, Manager.—This is a new creamery, with concrete floors and smooth interior surfaces. Milk is received in an upper room and flows by gravity to the basement. The cooling vats are made of cement. Water is obtained from a driven well fifty feet deep. Thirty-nine farmers supply 4,000 quarts of milk daily, which is all shipped to New York.

Location, Hackettstown. Alex. Campbell Milk Co., Owners; Nathan Creamer, Manager.—The floors in this creamery are made of cement. The interior surfaces are smooth and clean. New fly-screens have been placed in the doors and windows. Thirty-three farmers supply 3,000 quarts of milk. The water is obtained from the town supply.

Location, Hainesburg. Ira C. Hunter, Owner; I. C. Hunter, Manager.—This is a new creamery which takes the place of one which was burned. Twenty farmers supply 1,000 quarts of milk, which is all shipped to Brooklyn. The drain pipe should be extended to a greater distance. The floors and cooling vats are made of cement. All waste fluids are discharged into an open ditch outside the creamery building. Water is supplied from a hill spring.

Location, Long Bridge. Mutual Milk and Cream Co., Owners; J. M. Reed, Manager.—Twenty farmers supply 2,400 quarts of milk daily, which is all shipped to New York. The interior of this creamery has been cleaned and painted. The water is obtained from a spring in the creamery, and was found, upon analysis, to be polluted.

Location, Marksboro. Mutual Milk and Cream Co., Owners; L. Paddock, Manager.—Ninety-five cans of milk are received and shipped to New York. The interior of this creamery has been cleaned and neatly painted. The water is obtained from a hill stream and a sample has been taken for analysis.

Location, Rocksburg. Elmer Worthington, Owner; A. S. Michner, Manager.

—This is a butter factory, and is equipped with churn, butter-worker, printers, &c. The floors are cement and the floor drainage is discharged into a creek in the rear of the creamery. Thirty farmers supply 1,600 quarts of milk daily. The place was clean at the time of inspection.

Location, Tranquility. Mutual Milk and Cream Co., Owners; Garret Decker, Manager.—Fifteen farmers supply 1,000 quarts of milk, which is all shipped to New York. The family have vacated the living-rooms in this creamery, and the interiors have been repaired and painted.

Location, Vails. Fulloam Dairy Co., Owners; Fred. Mattock, Manager.—Fifty-four farmers supply 1,600 quarts of milk daily to this creamery. There has been a new floor made in the receiving-room and the side walls and ceiling have been sheathed with smooth boards. The main floors are made of cement. The manager's family have vacated the living-rooms in this creamery.

# Report on State Laboratory of Hygiene.

BY R. B. FITZ-RANDOLPH, DIRECTOR.

To the Board of Health of the State of New Jersey:

GENTLEMEN—I have the honor to submit the following report of the operations of the State laboratory of hygiene during the year ending October 31st, 1907:

The examinations made in this laboratory fall in four classes: the examination, for diagnosis, of specimens sent by physicians from suspected cases of communicable diseases, both human and animal; chemical analyses of foods and drugs, the authority to perform such analyses being contained in chapter 86 of the laws of 1901, its amendments and supplements; the chemical and bacteriological examination of water from public and private supplies; and miscellaneous analyses; the latter consisting in the examination of samples submitted by the fish and game commission, the analyses of kerosene and other petroleum products, as provided for in the act entitled "An act to regulate the sale of petroleum and its products," approved March 31st, 1882; the analysis of linseed oil under the provisions of an act entitled "An act to prevent the adulteration and deception in the sale of linseed or flaxseed oil," approved May 18th, 1898; and the examination of other substances in connection with investigations relating to the public health. The greater portion of the work done in the laboratory has been along the same lines as that performed in previous years. The number of specimens examined in each department during 1907 is substantially greater than those of previous years, and it is to be expected that this increase will continue in the future. In the bacteriological department, the total number of specimens examined is 8,993, an increase over the number examined in 1906 of 11.9%. The number of samples of foods and drugs examined is 4,245, an increase of 9.6%, and the number of samples of water is 549, an increase of 42.9%. The equipment of the laboratory is now sufficient to enable routine examinations of specimens from suspected cases of diphtheria, pulmonary tuberculosis, typhoid fever, malaria and gonorrhea to be made with accuracy and speed. Tests for anthrax and glanders are made with difficulty, and the results obtained are more or less uncertain because the laboratory is so situated that it is impossible to keep on hand a supply of animals for experimental purposes. Owing to the difficulty of obtaining suitable animals at short notice, the results of examinations requiring the use of such animals cannot have the same degree of certainty, nor can reports be made with the same promptness as if suitable animals were

Numerous additions have been made to the equipment of the food and drug laboratory during the year, and it is now provided with apparatus sufficient to enable the performance of almost all the analytical work required with accuracy and economy of time and materials. On account of the crowded condition of the laboratory, due to lack of room and insufficient facilities for storage, the depreciation of apparatus has been greater than would occur in properly equipped rooms. The new laboratory in the State House is now nearing completion, and it is believed that the facilities there provided for the care and storage of apparatus will be adequate. During the last two years, owing to the passage of chapter 313 of the laws of 1906, which imposes a

heavier penalty for milk to which water or any other substance has been added, than for milk which is merely deficient in milk solids, it has been necessary to spend much additional time in analytical work on milk samples, resulting in a material restriction of the investigation of other food products. More complete investigations of the foods and drugs sold within the State is greatly to be desired, but cannot well be undertaken unless the laboratory staff is increased. During the year a comprehensive revision of the food and drug laws of the State, which brings them into substantial agreement with the Federal food and drug act, was passed, but does not take effect until October, 1908. When this act becomes effective much greater progress will be made in preventing the sale of adulterated foods and drugs, as its provisions include many matters not covered by the present law. An arrangement has been made with the Secretary of the United States Department of Agriculture whereby the director of the laboratory will be enabled to co-operate with the Federal authorities in the enforcement of the national food law.

The number of prosecutions ordered during the year by the State board of health for violations of the food law is 354. The necessity of attendance at court on the part of the chemists attached to the laboratory during these prosecutions has been a very serious hindrance to the work of the food and drug department, and has resulted in a diminution of the amount of analytical work performed. Legislation which will prevent this interference with the work of the laboratory, by making a chemist's certificate prima facie evidence of the facts contained in it, is greatly desired, and, if it could be obtained, would result in a considerable increase in the number of specimens examined without additional cost. An assistant chemist, whose duties consist in the examination of water and the inspection of sources of water-supply, was appointed in June, 1907, and since that date a beginning has been made in the systematic examination of water from certain public supplies throughout the State. The results of these examinations will be found in the tables of water analyses given later in this report.

#### BACTERIOLOGICAL DEPARTMENT.

The bacteriological laboratory is open for the reception of specimens from 7:45 A. M. until 5 P. M. every day except Saturday and Sunday. On Saturday the laboratory closes at noon, and on Sundays and holidays it is open from 8:30 A. M. to 10 A. M. The last mail received at the laboratory arrives at 7 P. M. on weekdays and at 12 M. on Sundays. Specimens coming in by these mails will be examined on the following morning. The regular work of the bacteriological department consists of the routine examination for diagnosis of specimens from suspected cases of diphtheria, pulmonary tuberculosis, typhoid fever, malaria and gonorrhea. Besides this regular work, the laboratory is prepared to undertake, when practicable, the investigation of other communicable diseases. For the regular work the laboratory provides mailing cases conforming to the requirements of United States Postal Order No. 176, which cases are distributed to repositories located throughout the State, and can be obtained from them or from the laboratory, on request. A list of these repositories will be found on pages 184 to 192 of this report.

Table A shows the number of specimens examined during the year, arranged by months. Table B is a summary of the examinations, arranged by towns. Table C shows the number of specimens examined each year since the laboratory has been in operation. Table D is a list of repositories where mailing cases for sending specimens from suspected cases of communicable diseases can be obtained.

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TABLE A.—SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR, ARRANGED BY MONTHS.

•	DII		TUBE	RCU-	TYPE FEV		MAL	ARIA.	MISCI	ELLA- DUS.	
монтн.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Total.
November, 1906	208 203 213 130 149 167 236 191 151 98 109 150	130 141 103 91 116 118 196 225 69 44 41 69	222 204 285 237 294 304 312 239 246 208 198 275	27 25 34 39 36 33 40 35 24 20 30	158 115 115 104 107 104 124 99 166 237 188 221	28 14 10 12 14 12 18 12 22 46 27 32	12 6 10 5 9 11 10 14 15 18 16	3 8 1 1 2	11 5 9 13 6 6 9 9 7 10 6 7	1 1 2 2 3 2 3 1 2	792 716 780 685 782 757 945 830 714 689 608 795
Totals	2005	1343	3024	378	1738	237	135	14	98	21	8998
Grand totals	38	348	34	02	19	75		149		119	8993

TABLE B.—SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR,
ARRANGED BY CITIES AND TOWNS.

		PH-	TUBE	ercu-	TYPI	HOID ER.	MAL	ARIA.		ELLA- OUS.	
TOWN.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Total.
Absecon	3									i	
Allamuchy									1		3 1 2 2 69 129
Allentown					$\frac{2}{1}$						2
Andover	1	<u>-</u>								, <b></b>	2
Arlington Asbury Park	13	3	21	2	25	1	4				69
Asbury Park	19 1	8	66	16	15	1	4		•••••		
Ateo	38	25	41	6	66	7	2	••••••			1 185
Atlantic Highlands			1 2	ı	00	'	-				3
Bay Head	1	2	l		1	I					
Bayonne		l ī	14	3	$\tilde{2}$		1				27
Belford	. <b></b>		1				<b> </b>				27 1 8 26 1 2
Belmar			2	1	3		1		1		8
Belvidere	11	10	5							[	26
Bergenfield	<u>-</u>		1								1
Bernardsville	1	3	1 13		3	• • • • • • • • • • • • • • • • • • • •			ļ		2
Beverly		li	13	1 2	4		1	1	''''i'		24 22 2 1
Blackwood		I ^	2	-			-	1 -			22
Blairstown			l								ī
Bloomfield		2	31	1	29	1					69 1
Bloomsbury			1								1
Boonton	1		8		6	1					16
Bordentown		4	5		2	[- <b></b>	!		ļ		16
Bound Brook			2					•••••	·····		4 4 2
Branchville		•••••			3 ,	••••••		•••••			4
Bridgeport			1	i r	ļ • • • • • • • • • • • • • • • • • • •	· • • • • • • • • • • • • • • • • • • •				· · · · · · · · · · · · · · · · · · ·	2

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TABLE B.—SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR, ARRANGED BY CITIES AND TOWNS—(Continued).

	DII THE		TUBI LOS	RCU-	TYP	HO1D VER.	MAL	ARIA.	MISC	ELLA- DUS.	
TOWN.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Total.
Bridgeton	5		21 20								26
Burlington	1		20	1	13	5		•••••			4
ButlerCaldwell	12 5	6	8 9	4	5	••••••	1 7		•••••	l······	9
Califon					ĭ						
Camden	89	82	221	23	95	10	2	2	2		47
Cape May Cape May Court House Carlstadt	1		6		8	2					1
ape May Court House	3	2	6	1	6	1	•••••	••••••	••••••	······	1
Carmel			í								-
arteret	2		9 1 6 9 4 3		6						
Cassville			6		1						
edarville	1	1	9		1	•••••			1	2	1
Chatham	3 12	1 12	4	•••••	3 1			• • • • • • • • • • • • • • • • • • • •			1
layton	12	12	9	•••••	1	•••••					2
liffside	1		-								
Clinton			2 2 1								
loster Collingswood			2		1						1
ollingswood	4	3	1		1						
olumbusi	1		1	••••••	8	•••••					
ranbury	10	12	10	1	2 15	8	•••••	•••••			
rosswicks	10	3	13 1 1 1		15	8		•••••			อ
Dayton	1		ī		î						
Deerfield			· 1								
Delanco			1								
Dennisville	3	•••••	8			<b></b>					1
Dover Dumont	2	•••••	1		•••••			•••••	•••••		
Ounellen	2		3	···· 2	•••••		•••••	•••••			
East Newark	l i		ĭ	<u>-</u>	2						
East Orange	3	4	8 1 5 3 1 59	3	38	1	1		1		11
East Orange East Rutherford			3 12		1						
Egg Harbor City	5	2	12		_4	1					. 2
Elizabeth	694	794 7	152	22 8	57 13	12 1	5 2 1		1	······	173
Englewood	10		11	8	19		ız		1 1		1
	7	_ 4	9				ī				
air Haven	6	4	2 1	1			ī				
fairton	6 3	1	11 2 1 7	1			1				1
Pairton	18 7 6 3 5	1 4	2 1 7 2	1			1				1
Tairton Tanwood Tarmingdale	6 3 5	1	7 2	1	1		ī				1
FairtonFanwoodFarmingdaleFlanders	6 3 5	1	7 2		1 1						1
FairtonFanwood FarmingdaleFlandersFlemington	5	4	7 2	8	1 1 3 3	1	1  2				1 1 2
Fairton Panwood Parmingdale Planders Plemington Plorence	6 3 5	1	7 2	8	1 1 3 1						1 1 2
Pairton Panwood Parmingdale Planders Plemington Plorence Ort Lee Pranklin Furnace	2	4	7 2 13 2 4	8	1 1						1 1 2
Pairton Fanwood Farmingdale Flanders Flemington Florence Fort Lee Franklin Furnace Freehold	5	4	7 2	8	1 1 6	1					1 1 1 2
Pairton Panwood Parmingdale	2 4	2	7 2 13 2 4	8	1 1 6 2	1	2				1 1 1 2 2
Faitton Fanwood Farmingdale Flanders Flemington Florence Fort Lee Franklin Furnace Freehold Frenchtown	2 4	4	7 2 13 2 4 12	8	1 1 6	1					2 2 1
Fairton Fanwood Farmingdale	2	2	7 2 13 2 4 12	8	1 1 6 2	1	2				2 2
Fairton Fanwood Farmingdale Flemington Florence Fort Lee. Franklin Furnace Freehold. Frenchtown Barfield Georgetown Haldstone	2 4 1	2	7 2 13 2 4 12 4	8	1 1 6 2	1	2				2 2 1
Fairton Fanwood Farmingdale Flanders Flemington Florence Fort Lee Frankiln Furnace Freehold Frenchtown Barfield Georgetown Hillette Hadstone	2 4 1 1 1	2	7 2 13 2 4 12	8	1 6 2 4	1	2				2 2
Fairton Fanwood Farmingdale Flanders Flemington Florence Fort Lee Frankiln Furnace Freehold Frenchtown Barfield Georgetown Hillette Hadstone	2 	1 4 2 2	7 2 13 2 4 12 4 1 1 3	8 1	1 1 6 2	1	2				2 2 1
Pairton Panwood Parmingdale	2 	2	7 2 13 2 4 12 4	8	1 6 2 4	1	2				2 2 3
Faitton Fanwood Fanwood Fanmingdale Flanders Flemington Florence Fort Lee Frankin Furnace Freehold Frenchtown Jarfield Jeorgetown Jillette Jladstone Jlassboro Jlen Ridge Jloucester City Frandice	2 	1 2 2 1 1 5 7 8	7 2 13 2 4 12 4 11 1 3	8 1	1 6 2 4	1	2				2 2 1 1 4
Fairton Fanwood Fanwood Farmingdale Flanders Flemington Florence Fort Lee Franklin Furnace Freehold Freehold Freehold Florence Freehold Freehold Florence Freehold Freehold Freehold Freehold Freehold Florence Flore	2 	1 4 2 2	7 2 13 2 4 12 4 11 1 3	8 1	1 6 2 4	1	2				1 1 2 2 1 1 4 2
Fairton Fanwood Farmingdale Flanders Flemington Florence Fort Lee Frankin Furnace Freehold Freehold Freehold Florence Frenchtown Jarfield Jeorgetown Hillette Jladstone Jlassboro Jlen Ridge Gloucester City Jrandview Jrandwood	2 	1 2 2 1 1 5 7 8	7 2 13 2 4 12 4 1 1 3 18	8 1	1 1 6 2 4 8	1	2				1 1 1 2 2 1 1 4
Fairton Fanwood Farmingdale Flanders Flendington Florence Fort Lee Franklin Furnace Frenklin Furnace Frenchtown Barfield Beorgetown Hillette Blassboro Blassboro Blen Ridge Bloucester City Frantwood Frenwich Backensack	2 	1 2 2 1 1 5 7 8	7 2 13 2 4 	8 1	1 6 2 4 	1	1				1 1 1 2 2 1 1 4 2 6
Englishtown. Fair Haven Fair Haven Fair Haven Farmingdale Flanders Flanders Florence Fort Lee Franklin Furnace Freehold Frenchtown Farfield Foorgetown Fillette Fladstone Flassboro Flanders Flanders Frenchtown Frenchtown Frenchtown Frenchtown Flassboro Frenchtown Flassboro Flassboro Flandid Flandid Flandid Flandid Flandid Flandid Frenchtown Flassboro Flandid Flandi	2 	1 2 2 1 1 5 7 8	7 2 13 2 4 12 4 1 1 3 18	8 1	1 1 6 2 4 8	1	2				24 42 23 3 3 477 11 11 12 2 2 1 1 4 4 2 6 6 5 5

TABLE B —SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR,
ARRANGED BY CITIES AND TOWNS—(Continued).

		PH- RIA.		BIS.		HOID ER.	MAL	ARIA.		ELLA- DUS.	
TOWN.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Total.
Hamburg Hamilton Square	2										2
Hamilton Square Hammonton	1		8 1	2	2	ļ					2 6 8 10 9 1 3 95 64 24 17
Harrison			5	ī	4						10
Hasbrouck Heights			6	1	1						9
Heislerville Highlands	2		1 i		1						1 8
Hightstown	44	44	7			1					95
Hoboken Hopewell	6		87 2	4	15 16	1 6	1				64
Hudson Heights	9	4	4 2		10	١					17
Hudson Heights	4	ļ		ļ		ļ			ļ		6
Jamesburg Jersev City	13		155	8	33	4	<u>-</u>				214
Jersey City			1	ļ		ļ <u>.</u>	<u>.</u>				1
Junction Kearny		<b></b>	2	<u>.</u>	8		1 i	ļ	ļ		2 13 20 2 5 70
Kaynort	7	3	8		2		<u>.</u>		l		20
Kingsland Kinkora Lakewood		ļ	2								2
Kinkora	21	i	31 81	4	11	1 2	••••••••		·····		5
Lambertville					11	8					14
Laurel Springs					1	1					2 10
Lawrenceville Layton	1 1	1	. 4		1 1				1		10
Little Falls	ī		ļ <u>-</u>								ī
Lodi Long Branch	<u>-</u>	¦	18		38	11	1				1 2 68 72 13 1 22 4
Madison	89	21	1 7		4				1		72
Magnolia	1	1	7 4 1		6		1				18
Mantua. Maplewood Marlton	1	8	1	2	5	2	•••••	•••••			99
Mariton	2	ĭ	9								4
Matawan	1		8	2			1				12
Mauricetown Mays Landing	5		1		6	1					12
Mays Landing	]		1								1 12 1 14
Medford Mendham	9	2	1	1	$\begin{array}{c c} 2 \\ 1 \end{array}$	1	1				14
Merchantville	3		14	6	2 2						7 25 52
Metuchen	13	15	16	6							52
Middle Valley Midland Park	• 1	•••••	1 5	•••••	1	•••••	1		1		1 9
Millburn	10	2			4		2		2		20
Millville	8		58	8							69
Montelair	1	1	16	8	1 20	8					1 49
Moorestown	7		14		6.		4				31
Morris Plains	1 6	•••••	4 9	1	2 30						8 59
Mount Arlington					1	8 2 1					3
Mount Arlington Mount Holly Mullica Hill	21	2 1	11	5	15	1					8 53 3 55 8 1 5 95
Mullica Hill Naughright	2	1	1	1	3				1		8
Netcong	4				1						5
Newark New Brunswick	18	1	69 85	5 9	22	2 2	13	2			95 <b>13</b> 2
Newfoundland	10	1	3								3
Newton	25	16	21	3	2						67
New Village Norma	1		1	•••••••		••••••					1
North Plainfield	1			1							3 67 1 2 9 2
Nutley	2 2	3	3	1	· • • • • • • • • • • • • • • • • • • •	•••••					9
Oakland	2	ا								·I	2

TABLE B.—SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR,
ABRANGED BY CITIES AND TOWNS—(Continued).

		PH- RIA.		ERCU- SIS.		HOID ER.	MAL	ARIA.		ELLA- DUS.	
TOWN.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Total.
cean City			1		3						
cean Grovegdensburg	1	•••••	1								8 18 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
old Bridge oradell	26			ļ <u>.</u>	2	ļ					_
range	6	9	89	1 8	56	11	12		2	3	1
xford	U		4	l i	. 50	11	12			9	16
xford alisades Park	2	2	1	lî							
almyra	$egin{smallmatrix} 2 \\ 1 \end{bmatrix}$	1	2 6								
ark Ridge	2	_1	6	1	4	1	1				_ 1
assaic	36 14	15	94 117	13	111	12	16	1	8	2	30
aulsboro		4	114	8	21 6	1	1			•••••	10
emberton	5 2 3		3		٠ ا	•	·····	ļ			
enns Grove	3	1	l								
ennsville			1								
ensauken	5		1								
erth Amboy	1		28	5	5						
hillipsburg	2 6		9	1							1
Pitman Grove		8	1				7				
Plainfield Pleasantville	63 6	62	84	13 2	22		7	1			2
oint Pleasant	î	2	٥	_ z	5						
Pompton Lakes	-	• • • • • • • • • • • • • • • • • • • •	13	1	3		······ ···			•••••	
ompton Lakesort Norris	10	1	3	l	3				4		
rinceton	39	4	21	5	10						
uinton	1					<b> </b>					
lahway	56	6	27		50	11	1		1		13
Ramsey	18	11	8	2	4			<b></b>			4
taritan ted Bank	1	•••••	2	1	3		2				١.
lidgefield		•••••	3	1	li		-	1			
idgefield Park	3		8 2 5 2 10		8						,
lidgewood	2 1		23	4	12						
tingoes	1	1	1								
Liverside			4	1							
liverton	10	2	23 1 4 8 4 7 9	2 2	7		1				
lockawaylockaway	12	2	4	2	5 29	1 4			1		
Roselle	5 9	1	6		6	2	•••••				
oselle Park	4	2	2							•••••	
tosenhayn			2 1								
tutherford	21	12	22	1	6		2 2	1			
alem	3	3	15	2	3	2	2				
ayrevilleeabright	•••••			ī	1						
eabright	•••••	•••••	1 3	ļ <u>.</u>							
ecaucusergeantsville	•••••	•••••	1	1			• • • • • • • • • • • • • • • • • • • •		•••••		
hiloh	1	•••••				•••••				••••	
hort Hills					1						
killman					3	1					
mithburg					1						
omerville	14	4	21 2		7						
outh Amboy	1			······				••••••			
outh Orange	10	5	60	6	15 2		1				
outh River		•••••	2 3 1 2	•••••	4	······	•	•••••			
potswood pringfield	8	1	1		4	l	•••••				
nring Take		1	2		3				1		
pring Laketanhopettrling	3		ĩ	l	3 7	1					
tirling	1	1		l							
uccasunna ummit	2		4	5		ļ					:
	18	10	21	8	16	8	2				

TABLE B.—SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR,
ARRANGED BY CITIES AND TOWNS—(Continued).

	DII THE	PH- RIA.	TUBE			HOID ER.	MALA	RI \.	MISC	ELLA- DUS.	
TOWN.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Total.
Swedesboro	2		3	2							<del></del>
Sykesville	1		١								1
Tenatly	1		1		1	1	1	1		<u> </u>	6 5
Titusville	1				4						5
Toms River	1		6	1							8
Trenton	113	37	352	43	404	65	18	4	66	14	1116
Tuckahoe	1	•••••			1	1					3
Union Hill			4								4
Upper Montclair			2		11						13
Verona	1	1	4		2						8
Vineland	1	••••••	93	10	38	10					152
Waldwick		••••••	.3		1		•••••				4
Wanaque		•••••	1		····· <u>·</u> ··			•••••			1
Warrenville	1				1						.2
Washington	3	1	8	1	3			••••			16
Weehawken	3	••••••	8	•••••	<u>'</u>			•••••			11
Wenonah			1					•••••			1
West Cape May			2			•••••					2
Westfield	11	10	21	1	6		1	•••••			50
West Hoboken		••••••	48	21	10				• • • • • • • • • • • • • • • • • • • •		79
West Long Branch		•••••••	1		`						1
West New York	1	••••••	1		······						2
West Orange	3		24 10	2	9			• • • • • • • • • • • • • • • • • • • •			35 19
Westwille Westwood		1 2	107	4	6						18
	3	2	lí		1	1			•••••		
Whippany Wildwood	1		1 2	•••••	1	1					4 2 1 3 7 42
	1	••••••	Z		•••••						1
Williamstown Windsor			2								,
Woodbine	4		2	1			1				
	14	9	13	5	1 1			ļ			A
Woodbridge Woodbury	10	9	11	1 5	1 2	2		·····	ļ		25
Woodstown	1 70	2	6	1	1	4		l	l		12
	2 2	2	8	1 1	l i						11
Blank	2		. •	`····				•••••			
Totals	2005	1343	3024	378	1738	237	135	14	98	21	8998

TABLE C.—SHOWING THE NUMBER OF SPECIMENS OF EACH KIND EXAMINED SINCE THE LABORATORY WAS ORGANIZED.

	1896-97.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.†	1906.	1907.
Diphtheria	627	600	577	974	1,864	1,487	2,090	2,949	2,896	3,277	3,348
Tuberculosis	253	516	766	892	1,211	1,467	1,853	2,844	2,691	2,948	3,402
Typhoid Fever	27	175	339	431	739	884	1,333	1,272	1,268	1,556	1,975
Malaria		4	*	53	113	196	151	98	109	126	149
Miscellaneous	7	18	*	30	28	55	132	67	84	126	119
Totals	914	1,313	1,682	2,380	3,955	4,089	5,559	6,730	7,048	8,033	8,993

<sup>\*</sup>The number of these specimens has not been recorded.

<sup>†</sup>Thirteen months.

Town.	Denosite w
Allentown	Repository.
Alloway	
Andover	
Annandale	. Willard E. Berkaw, M.D.
Arlington	
	August A. Strasser, M.D.
**************	
Asbury	
Asbury Park	
Atlantic City	
"	· -
	.A. D. Cuskaden, druggist.
	.H. H. Deakyne, druggist.
" "	.Charles H. Jackson, druggist.
	.Wm. F. Ridgway, druggist.
44 44	.P. G. Clark, druggist.
Atlantic Highlands	.R. S. Matthews, druggist.
Bakersville	.A. R. Vickers, druggist.
Basking Ridge	.F. C. Jones, M.D.
Bay Head	.W. H. Katzenbach, M.D.
Bayonne	. Frank N. L'Estrange, druggist.
66	.J. A. Balinsky & Sons, druggists.
	.Charles H. Landell, druggist.
Beach Haven	
Belleville	
Belmar	
44	
Belvidere	
Berlin	·
Bernardsville	
Beverly	<u> </u>
	.Warren Street Pharmacy.
Blairstown	
"	
Bloomfield	
	.Wm. W. Keyler, druggist.
Bloomsbury	
Boonton	Inc S Towler M.D.
• • • • • • • • • • • • • • • • • • • •	
44	
Bordentown	
	. Woolley & Fitzgerald, druggists.
Bound Brook	
Bradley Beach	
*************	. Rose Brothers, druggists.
Branchville	/
"	.J. C. Price, M.D.

m.	
Town.	Repository.
Bridgeton	
	Albert S. Elwell, druggist.
	Chas. F. Dare & Son, druggists.
	Jno. H. Moore, M.D.
Burlington	
44	John W. Davis, druggist.
	H. B. Weaver, druggist.
Butler	S. E. Estler, druggist.
"	McCue's Drug Store.
Caldwell	Edwin E. Bond, M.D.
**	Wm. N. Hasler, druggist.
Califon	.T. Miller, M.D.
Camden	Board of Health.
44	. Cooper Hospital.
"	L. B. Hirst, druggist.
"	.Barret Bros., druggists.
44	.George M. Beringer, druggist.
46	.George J. Pechin, druggist.
46	.R. I. Haines, M.D.
46	.F. S. Macpherson Co., laboratory.
46	.Wm. P. Weiser, druggist.
"	. Mahaffey's Pharmacy.
"	.L. H. Wilson, druggist.
"	. Wilbur J. Leib, druggist.
46	
Cape May	.James Mecray, M.D.
" "	
	.J. M. D. Marcy & Co., druggists.
Cape May Court House	
Carlstadt	
Carteret	.J. J. Reason, M.D.
Cedarville	.W. P. Glendon, M.D.
Chatham	
44	
Chester	
	.W. A. Green's Pharmacy.
Clayton	.C. F. Fisler, M.D.
Clinton	
Closter	
Cold Spring	_ *
Collingswood	, 55
Columbus	
Cranford	.John Marien, druggist.
"	
Crosswicks	
Dayton	
Deerfield	
Delanco	
Dennisville	
Dover	. Kilgore & White. druggists.

Town.	Repository.
Dumont	J. E. Pratt, M.D.
Dunellen	
East Orange	Gillbard's Drug Stores.
	Grove Street Pharmacy.
" "	Frank L. Fieger, druggist.
East Rutherford	Wm. E. Odgen, M.D.
Egg Harbor City	
Elizabeth	
	Henry J. Schmidt, druggist.
	, 55
	Richard Frohwein, druggist.
	Walter I. McCann, druggist.
	David Strauss, druggist. Oliver & Drake Co., druggists.
	George J. Martin, druggists.
	William Rufus Richart, druggist.
66	
	William H. Reibel, druggist.
	Elizabeth General Hospital.
Elmer	
Englewood	
"	Wm. E. H. Schneider, druggist.
66	Lewis W. Brown, druggist.
"	Englewood Pharmacy.
66	Englewood Hospital.
Englishtown	•
	Asher T. Applegate, druggist.
Fairton	
***************************************	
Fanwood	
Farmingdale	W. R. Kinmouth, M.D.
Flemington	
Florence	
Forked River	
Fort Lee	
"	
Franklin Furnace	
Freehold	W. B. Duryee, druggist.
44	J. H. Rosell, Jr., druggist.
Frenchtown	
German Valley	
Gladstone	
Glassboro	, 55
***************************************	E. Mortimer Duffield, M.D.
Gloucester City	•
Grantwood	W. S. Hilliard, druggist.
Guttenberg	
Guilenberg	menry J. Gordon, druggist.

Town.	Repository.
Hackensack	. Hackensack Hospital.
	.Eugene A. McFadden, druggist.
66	
	.T. E. Van Stone, druggist.
66	
Hackettstown	.C. V. S. Rea, druggist.
66	.L. Farrow, M.D.
Haddonfield	.R. Willard, druggist.
Haddon Heights	.C. E. Shillett, druggist.
Hainesport	.W. C. Parry, M.D.
Haledon	.W. Clause, druggist.
Hamburg	. Joseph G. Coleman, M.D.
Hammonton	.J. L. O'Donnell, town clerk.
44	.Chas. Cunningham, M.D.
Harrison	.Board of Health.
"	.E. S. Goudy, M.D.
"	. Squier's Pharmacy.
Harrisonville	
Hasbrouck Heights	.J. A. Powelson, druggist.
Highlands	.Grandin V. Johnson, druggist.
Hightstown	
Hoboken	
"	•
	.Charles H. Schmidt, druggist.
44	
46	
*****************	, 55
***************************************	
**************	, 55
***************	
Holly Beach	•
Holmdel	
Hudson Heights	
Irvington	•
Jamesburg	
Jersey City	
-	George H. White, druggist.
	.L. E. Carpenter, druggist.
	James D. Adams, druggist.
	John C. Gallagher, druggist.
44 44	
	. Stein & Co., druggists.
	Frank O. Cole, druggist.
	.Herman J. Lohmann, druggist.
	.Wm. Buchbinder, druggist.
	Lyons & Ziegler, druggists.
	Benjamin F. Bache, druggist.
	.R. E. Wilhelm, druggist.

Town.	Repository.
Jersey City	
" "	
44 44	
44 44	
44 44	
44 44	James Foulke, druggist.
44 44	Lischke Bros., druggists.
Kearny	
	Board of Health.
	D. H. Hills & Co., druggists.
	Grenelle & Schenck, druggists.
	S. W. Cochran & Co., druggists.
	Lawrenceville School.
14	De Witt's Drug Store.
Layton	M. D. Hughes, M.D.
•	E. W. Jones, M.D.
	S. Eldridge Ewing, M.D.
Lodi	David A. Himadi, druggist.
	Board of Health.
" "	
**	
"	L. Rothenberg & Co., druggists.
** **	Frank K. Gano, druggist.
Lumberton .	J. H. Stermer, druggist.
"	
	F. H. Seward, M.D.
	L. C. Lyon, M.D.
•	B. B. Ransom, M.D.
	W. H. Zelley, druggist.
• •	
	George C. Spence, M.D.
	gH. C. James, M.D.
	Frank Freeland, M.D.
	Leo Robinson, druggist. J. W. Kohlerman, druggist.
	, ==
	Board of Health. George H. Hahm, druggist.
• •	
	Maxwell S. Simpson, M.D.
	k
	John T. Doughty, druggist.
	Emergency Hospital.
•••	

Town.	Repository.
Montclair	
	David H. Baldwin, bacteriologist.
64	
	Wm. L. Johnson, druggist.
	Mountainside Hospital.
Moorestown	
Morris Plains	
Morristown	-
	Brown & O'Connell, druggists.
66	
****	
	Morristown Drug Co.
Mount Holly	
Mullica Hill	•
Netcong	
Newark	
	Theodore W. Corwin, M.D.
***************	
	•
New Brunswick	
	Skillman & Van Pelt, druggists.
	Wm. Rust & Sons, druggists.
New Egypt	
Newport	•
Newton	
	H. O. Ryerson, druggist.
Norma	
North Paterson	
North Plainfield	
Nutley	Henry T. Lefferts, druggist.
Oakland	
Ocean City	. Bourse Pharmacy.
Ogdensburg	L. C. Burd, M.D.
Old Bridge	
Oradell	
	Orange Memorial Hospital.
	Sumpter L. Beegle, druggist.
	J. F. Behrens, druggist.
	Abram Mosler, druggist.
44	C. E. Dowling, M.D.
Oxford	, ==
Palmyra	L. L. Sharp, M.D.
Park Ridge	Henry C. Neer, M.D.
Passaic	Berger & Richter, druggists.
	Carroll Drug Company.
	Van Riper & Co., druggists.
	Passaic General Hospital.
66	•
"	
	Post & Friedrich Co., druggists.
46	Peter's Pharmacy.

Town,	Repository.
Paterson	Board of Health
	Gurdon E. Pellett, druggist.
	Maxwell Bukofzer, druggist.
	. Keller's Totowa Pharmacy.
Paulsboro	
Pemberton	
Pennsgrove	
64	
Perth Amboy	
	Wm. E. Ramsay, M.D.
	F. A. Seaman, druggist.
Phillipsburg	
	Jno. D. Hornby, druggist.
Pitman Grove	
Plainfield	
"	
44	
66	. W. H. Murray, M.D.
66	. Frank Dencklau, druggist.
Pleasantville	
Point Pleasant	
Pompton Lakes	
Port Norris	S. T. Day, M.D.
66 66	. E. B. Bradford, M.D.
Princeton	Wm. L. Briner, druggist.
"	Marsh & Burke, druggists.
Rahway	W. E. Cladek, M.D.
	George F. Brown, druggist.
	New Jersey Reformatory.
	Joseph G. Smith, druggist.
	. Vanderbeek Drug Co., druggists.
Raritan	
Red Bank	
	Henry C. Elsing, M.D.
Ridgewood	•
Ringoes	
Riverside	
	• , ,
Rockaway	
Rocky Hill	Roard of Health
Roebling	
Roselle	
Rutherford	
Salem	
66	
"	
	W. H. Andrews Co., druggists.

Town.	Repository.
Seaside Park	. Manhaffett's Pharmacy.
Shiloh	.E. G. Hummell, M.D.
Skillman	. New Jersey Epileptic Village.
Somerville	.John D. Case, druggist.
	.E. V. Meachem, M.D.
South Orange	.H. A. Pulsford, M.D.
66 66	.Wm. C. Brown, druggist.
South River	.S. E. Selover, M.D.
66 46	.F. W. Bissett, M.D.
46 46	. Silk's Drug Store.
Spotswood	. J. G. Denelsbeck, M.D.
Springfield	.J. A. Stites, M.D.
Spring Lake	
- •	.D. H. Hills & Co., druggists.
Stanhope	, 55
Stillwater	<u> </u>
Succasunna	•
Summit	*
66	
Swedesboro	, <b>3</b> 0
Tenafly	.J. B. W. Lansing, M.D.
Titusville	
Toms River	
Town of Union (Weehawken)	.August Frank, druggist.
	.David Weismann, druggist.
Trenton	
46	
46	
"	
46	.St. Francis Hospital.
46	.McKinley Hospital.
44	.Oliver Twist, druggist.
44	.John J. Strasser, druggist.
44	.James L. Mathis, druggist.
46	. Stuckert Pharmacy.
46	. Lewis W. Long, druggist.
46	.D. Wiley Baker, druggist.
.46	.C. S. Thatcher, druggist.
"	.G. D. Laird, druggist.
	. Holcombe Brothers, druggists.
44	. David E. Stretch, druggist.
.66	.Oscar Davison, druggist.
44	. Tidd's Pharmacies.
	.Chas. Young, druggist.
"	.Chas. D. Scott, druggist.
46	. New Jersey State Prison.
Tuckahoe	
66	.J. S. Douglass, M.D.
Tuckerton	.Reeve's Pharmacy.
Union Hill	. Weismann & Kost, druggists.

Town.	Repository.
Upper Montclair	J. H. Laubenheimer, druggist.
Verona	.: Verona Pharmacy.
Vineland	M. R. Faulkner, M.D.
46	Alfred M. Pierson, druggist.
66	West Side Pharmacy.
66	Baker House Pharmacy.
Waldwick	B. A. Ver Nooy, M.D.
Washington	Chas. M. Williams, M.D.
Weehawken	Wm. Kyvitz, druggist.
Westfield	Bayard Pharmacy.
46	Geo. W. Frutchey, druggist.
West Hoboken	
" "	Frank H. Eckert, druggist.
West Nutley	. James Crammond, druggist.
West Orange	
" "	A. N. Dretzfield, druggist.
Westville	C. E. Davis, druggist.
Westwood	Theodore E. Townsend, druggist.
Wharton	
White House Station	W. W. Pursell, M.D.
Wildwood	
Windsor	Geo. A. Silver, M.D.
Woodbine	E. J. Asnis, M.D.
Woodbridge	Board of Health.
66	Ira T. Spencer, M.D.
46	B. W. Hoagland, M.D.
Woodbury	J. W. Merritt, druggist.
Woodstown	Buzby's Pharmacy.
66	Harry Guest, druggist.

The list of repositories has been recently revised, and it is believed that outfits can always be obtained at any of these places. The number of repositories is now 431, and almost every locality in the State is satisfactorily supplied with outfits. In order to insure speedy transportation, persons mailing containers should call the attention of postmasters to the fact that postage on these packages is prepaid at letter rates and that therefore they should be forwarded with first class mail.

During the year 549 samples of water have been examined from sources shown in the following table:

#### TABLE E .- EXAMINATION OF WATER SAMPLES.

Public supplies	138
Dairies	190
Creameries	60
Private supplies other than dairies and creameries	118
Public institutions	40
Miscellaneous	3

The results of these examinations will be found in Tables F, G, H, I, J and K. Because of increased laboratory facilities it will be possible during the coming year to make monthly examinations of samples of water from about forty public supplies in addition to the regular examinations of samples from premises where milk is produced for sale. New Jersey is a thickly populated State and its population is rapidly increasing. Some of the watersheds from which water for public supplies is obtained are already hopelessly polluted, others are so thickly settled that constant watchfulness is required to keep them free from dangerous contamination. While we must rely, in the case of surface waters, mainly on constant inspection to secure pure and wholesome water, yet the results of analyses, when properly interpreted and used, are often of great value in supplementing the work of inspection, and it is for this purpose that the laboratory examinations are undertaken.

				_						• .	
NO.	D	AT	E.		LOCAL	JTY.	DESCRIP	TION (	OF SOURCE.	Color.	Odor, cold.
E 2037	July		1907	-	Asbury Park		Artesian w			0	0
B 4504	Aug.	28,	"			•••••••••••••••••••••••••••••••••••••••				0	0
E 1911	July	2,	"	"					feet	0	2-ma
B 4581	Oct.	15,		.::l	**	E. Jer-		•••••	• • • • • • • • • • • • • • • • • • • •	0	0
E 1601	Dec.	3,	1906	١	sey Coast V	Vater Co.∫	<del></del>	•••••	• • • • • • • • • • • • • • • • • • • •	•••••	2-v
E 2039	July	2,	1907	١{۱	Asbury Park sey Coast V	Vater Co.	······	••••••		45	1-v
E 1980	Aug.	28,	**	Ì	Asbury Parl sey Coast V	E. Jer-	Kisner's p	ond		0	0
		•		}	Asbury Park	t. E. Jer- 1	_				
B 4505	-	28,		Ì	sev Coast V	Vater Co. ( )	•		•••••	-	1-ma
B 4530	Oct.	15;		{	Asbury Parl sey Coast V	Vater Co.				0	0
B 4528	Aug.	30,	1000	,	Avondale					0	O .
G 36 E 1747	Nov. Feb.	18.	1907	7	Bloomfield					0	0 .
E 2027	May	27,	**		Bogota			•••••		0	0
E 2001	July	20, 11.	**	•••	Bordentown		Cueties we			10 0	0
E 2017 E 2018	Juin	11.			**		Sucuon we	311	••••••••	ŏ	ő
E 1923	Oct.	8,	"		"		Reservoir	well		Ŏ	Ō
B 4542	Sept.	5,		•••	Bound Broo	k	Brooks and	d well		25 25	1-ma
B 4543 B 4730	Oct.	5, 8,	"	•••	Burlington .		Chimmey I	COCK Dr	OOK	10	2-w 1-mu
D 8156	Nov.	30,	, 190		Elberon				00k	ŏ	ō
E 2090	July	16,		7						, .	0
E 2038 E 1461	Jan.	16, 17,		•••						0	0
B 4519	Aug.	29,	. "		Hackettstow	n	Old reserv	oir		20	2-v
B 4520	,,-	29,		•••	1 ::		44. 44			0	0
B 4521 B 4522	"	30, 30,			"	••••••	North Hac	Kettstor	wn reservoir	0	1-ma 2-ma
B 4534	Sept.	2,	"		"		New reserv	voir	•••••	12	0
B 4535	"	2,		•••	" * }				· · · · · · · · · · · · · · · · · · ·	0	0
E 2059 E 1922	July Aug.	30, 21,		•••	Lambertvill					0	0 1-p
B 4514	Sept.	. 3,			"				ncocas creek	25	1-ma
E 2033				•••	Lumberton.	••••••	South bran	nch, Ra	ncocas creek	160	2-▼
B 4976 B 4977	Sept.	12,	' ''	•••		•	L'AUCOCAS (	creek		150 120	0
E 1494	May	15	, "		Madison					0	0
E 1896	Jan.	9, 20.		•••	Metuchen Millburn				mixed		. 0
B 4508 E 1462		18			Moorestown		Untiltered	water f	rom stream		
E 1463	**	18			44		Unfiltered	water a	after passing } tank		0
E 1465		18			"		Unfiltered	water f	rom pond		. 0 .
E 1906		16 15		•••	1 ::	•••••	**	"	" stream	0	. 0
E 1948	1 -	. 15. 15		•••		•••••	Water from	n andi	entation basin.	1	0
E 1949	1		,	•••	1	•••••					1-
E 1907 E 1464		16 18	•	•••			Filtered w	ing setti ater	ling tank		. 0
E 1908	May	16	, "		"		"	"		.	:lo
E 1998	Aug.		, "	.;;	Mondatorm	Monate'	"	"		. 0	0
B 4998	Oct.	17	, "	{	Morristown Aqueduct	Morris; Co				. 0	0
E 2068	July	25			Mount Holl	y					2-8
E 2067		25		•••			Rancocas	creek		. 200	2-8
E 1927 E 1928		. 3							ilters		1-mu 1-mu
B 4619	Oct.	2	; "		. "		Reservoir	under f	ilters	. 1 50	o
4618	"	2	<u>'</u> , "	••		••••••	Rancocas	creek		. 140	2-w

FROM CERTAIN PUBLIC SUPPLIES-PARTS PER MILLION.

	1					NITRO	EN-					.93	
Odor, hot.	Turbidity.	Total solids.	Loss on ignition.	Mineral residue.	As ammonia.	By permanga- nate,	As nitrites.	As nitrates.	Chlorine,	Alkalinity.	Iron.	B, coli communis per cem.	Appearance on ignition.
0	0	100	31 35	69 52	.000	.022	.002	.080	1.5 4.5	48.0 44.0	0.4	0.0	No darkening.
3-ma	0	84	18	66	.034	.030	.001	.040	3.0	15.0	7.0	0.0	No darkening. Iron
0	0	100	18	82	.000	.004	.001	.000	2,5	47.0	0.0	0.0	color residue. No darkening.
1-v	1.				.008	.024	.000	.000	11.0		0.0	0.0	ito saracitug.
2-v	Q	90	33	57	.080	,122	.002	.200	45.0	26.0	0.4	0.0	No darkening.
	10	124				100	Total	1		100	100		
0	0		54	70	.026	.100	.001	.160	9.0	7.0	0.6	0.0	Darkening.
1-ma	0	97	33	64	.012	.092	.001	.200	9.0	9.0	0.0	0.0	No darkening.
0	0	90	21	.69	.000	1000	.001	.280	9.0	7.0	0.1	0.0	No darkening.
0	0	90	24	66	.012	,052 ,048	.002	.280	7.0	32.0	0.0	10.0	Darkened.
0	0	80	29	51	.028	.044		.280	4.0	27.0	0.4	10.0	Darkened.
0	0	225		157	.008	.026	.003	2.000	7.5	73.0	0.2	0.0	No darkening.
)	60	98	36	62	.010	.036	.002	1.800	4.4	6.0		D'btful.	
)	0	53 62	25 31	28 31	.010	.042	.002	2.560	4.5	9.0	0.0	10.0	No darkening.
	0	49	21	28	.004	.064		2.800	5.0	8.0 6.0	0.4	0.0	No darkening. No darkening.
2-ma	sl	126	46	80	.012	.130		.160	4.5	67.0	0.8	10.0	No darkening.
2-W	s1	120	53	67	.048	.172	.002	.120	5.0	66.0	0.6	10.0	Darkening.
2-mu	81	82	31	51	.004	.144	.002	.360	5.0	16.0	1.2	0:1	Slight blackening.
0	0	168	60	108	.022	.012	.003	.000	7.0	124.0	0.4	1.0	No darkening.
3	0	288	90	198	,000	.006		2.000	7.5	107.0	0.2	1.0	and the same of th
0	0	140	36	104	.000	.034	.001	2.200	7.0	57.0	0.3	10.0	No darkoning
2-v	si	56	31	25	.034	.130		0.320	5.0 2.5	57.0 20.0	0.2	1.0	No darkening. Slight darkening.
0	0	88	32	56	.006	.102	.002	0.360	2.5	20.0	2.0	1.0	No darkening.
l-ma	0	46	10	36	.006	.080	.002	1.080	2.0	11.0	0.0	0.0	No darkening.
3-ma	s1	50	13	37	.032	.178	.004	1.080	2.0	11.0	0.0	1.0	Slight darkening.
0	0	57	16	41	.008	,128	.006	,360	3.5	19.0	0.2	1.0	Slight darkening,
) 1-v	0	49	9	40	.012	.082	.001	.360	3.5 2.5	19.0	$0.3 \\ 0.1$	10.0	Slight darkening.
2-p	0	95	31	64	.000	.142	.005	.160	2.5	47.0	0.3	10.0	No darkening.
2-ma	81	106	49	57	.012	,228	.004	.320	4.0	47.0	0.3	0.0	Darkening.
-v	0	52	34	18	.036	.150	.002	.000	4.0	5.0	1.5	0.1	No darkening.
)	0	104	44	60	.024	.190	.004	.120	5.5	12.0	1.2	0.1	Blackened.
)	0	160	33 48	27 112	.008	.122	.001	1.400	5.5	12.0	$\frac{0.2}{0.2}$	0.1	Blackened.
5		100	40	112	.006	.036	.001	1.600	7.0	93.0	0.2	10.0	Darkened slightly.
)	sl	77	45	32	.126	182	.007	.000	4.5	37.0	0.3	1.0	Blackened.
							*****				70.00	1.0	
) .	-				,016	.060		3.600	1300	********	V - V	10.0	
		*******		******	.044	.080	.003	0.600				1.0	
)	si	135	61	74	.050		.004	0.880	10.0	17.0	2.0	0.1	Slight darkening.
	81	166	65	101	.042	1 P. P. C. O.	.002	1.800	8.0	18.0	100	10.0	Slight darkening.
)					.050	.084	100	0.800	11.5			10.0	Iron-color residue.
)					.012	.036	.003	3.600				0.0	
)	166			*****	.034	.050	.003	0.600	10.5			0.0	Company of the Compan
	0	108	49	59	.006	.156	.002	2.200	7.0	19.0	10.5	10.0	Slight darkening.
)	0	78	28	50	.000		.002	.000	3.0		0.0	10.0	Slight darkening.
2-s	0	48	24	24	.034		.002	.080	3.5	3.0	0.3	1.0	No darkening.
-8	40	72	39	33	.030	.184	.002	.160	5.0	3.0	3.2	0.1	Darkening.
-mu	50	41	10 22	31	.012	.076	.001	.000	5.0	6.0	0.3	10.0	Blackened
2-mu I-w	50	65 61	39	43	.024	.172	.002	.080	5.0	7.0 5.0	2.5	1.0	Decided blackening. Slight darkening.
I-W	60	88	49	39	.018	.154	001	.280	3.5		2.0		Darkening.

TABLE F.-RESULTS OF ANALYSES OF SAMPLES OF WATER FROM

					• .						
NO.	D	AT	E.		LOCAUIT	Υ.	DESCRIPTI	ON OF SOURCE	Æ.	Color.	Odor, cold:
E 2011	June	07	1907	,—	New Brunswick	<del>,</del>  ;	Militown				0
E 2012	44	27, 27, 27,	44	<b>'</b>	44 44		"			20	0
E 2008	68	27,	"				4.			100	0
E 2009 E 2010		27, 27,	"	•••	North Plainfield Perth Amboy			······	1	100 muddy	ol ol
E 1914	July	9,	"		North Plainfield	1	Artesian well	·····		muduy 0	0
E 1484	Mar.	22.	"		Perth Amboy		Wells			0	Ō
E 1485 E 1486	**	22, 22,	"	•••	'' '' ····		Ground stora	ge Well		0	0
B 4601	Sept.	17.	44		"		Stream enteri	ing reservoir		25	3-ma
		17,	"		" " …		Runyon pond	l <u>.</u>		55	3-s
B 4603 B 4604	;;	17, 17,	**	•••	 Point Pleasant		Artesian well	(Runyon)			0
B 4516	Aug.	28,	**	•••	Point Pleasant		Series of driv	en wells			1-sp 0 .
B 4517		28.	"			<b></b>	Storage tank.			0	0
B 4518 B 4980	Sept.	28, 21.	"	•••		·;······			••••••		0
E 1491	Apr.	24,	46		Rahway		W 6118	· · · · · · · · · · · · · · · · · · ·			Ö
E 2081	July	8,	"				Rahway rive	r at intake		20	2-ma
E 2080 E 2054	Aug.	8, 5,		•			Outlet from 1	ilters		0 35	0 1–8
E 2099	Aug.	5	**	•	"		Outlet of filte	ers			1-mu
<b>B</b> 4540	Sept.	6,	"		44		Rahway rive	r at intaker at intake		30	3-ma
B 4541 B 4622	Oct.	6,	"	•••			ontiet of nite	3T8		0 20	1-ma 2-ma
B 4623	**	7.	4.6				Outlet of filte	r at intake ers		0	2-ma 0
E 1866	_ "	9,	"		"		Filtered at in	stitution		Ŏ	Ŏ
E 1919 B 4572	June Sept.	19, 23.	"	•••	Ridgewood		Artesian well	l, 200 feet deep.	•••••	0	0
E 1867	Jan.	7,	"		Roebling		Before enteri	ng hot-water he	ater.		
E 1868	- "	7,	"		"		After leaving	hot-water heat	er		
E 1474 E 1478	Feb.	18, 13,	**	••••	;;	••••••	Filtered wate	e <b>r</b>	•••••		0
E 1988	Aug.	10,	44		"		Intake of filt	ration plant	· • • • • • • • • • • • • • • • • • • •		
E 1989		10,	"	•••	"		Village sprin	g	•••••		
E 1932 E 1990	**	15, 10,	**	•••	"	••••••	Spring in mii Village nine	ıı yard	•••••	Ο.	0
E 1991	"	10,	44		"		Outlet from f	ilters			
E 1992 E 1993	66	12, 12,	"	•••	Ridgewood		Spring, 2½ fo	eet deep	•••••	Ŏ	0
E 1993 E 1994	"	12,	**				village supp. Suction well	of filtration pla	nt	l ö	6
E 1930	1 "	13,	"				Dug well, No.	4, Knick'boc'r	row	ŏ	ŏ
E 1933 E 1934	"	18, 13.	"	•••			" " No.	. 8, "	"	0	0 1-v
E 1931	"	13,	**		Springfield		Intake of filt	er plant	••	85	2-8
E 1935	11 T-1-	13,		•••	G44 -3 -		Dug well, No.	1, Knick'boc'r	row	ő	3-8
E 2024 B 4995	July Oct.	16, 17,		•••	Summit		Driven well,	500 feet deep,	••••••	0. 10	0
B 4996	1000	17,	"		44		Green brook.	·····	• • • • • • • • • • • • • • • • • • •	. 10	10
E 1981	Aug.	6,	"	•••	Trenton		Pumping sta	tion		20	1-mu
B 4501 B 4502		21, 21.	•	•••			"	44	•••••	0	1-v 2-v
B 4545	Sept.		"		44		- 44	٠٠	<b></b>	12	2-8
B 4544		4,		•••							3-8
B 4598 B 4599	1	10, 10,					Reservoir	er at intake		0	2-ma 3-mu
B 4600	"	10,	"				Tap		• • • • • • • • • • • • • • • • • • •	l ö	1-ma
B 4575	"	18.	"				reservou			1 20	2-ma
B 4550 B 4609	"	18, 20	٠.,	•••			Tap	or at inteba	•••••	20 30	2-ma 2-ma
B 4610	"	20, 20,	"		"		Pumping sta	er at intake tion	• • • • • • • • • • • • • • • • • • •	80	2-ma 2-ma
B 4614	"	25.	**		"		Тар		•••••	35	2-mu
<b>B</b> 4615	ı "	25,	• • •	•••			keservoir	·····		35	2-ma

# CERTAIN PUBLIC SUPPLIES—PARTS PER MILLION—(Continued).

			. 7		2	NITROG	EN-		7			is	
Odor, hot.	Odor, hot.  Turbidity.  Total solids.  Loss on ignition.  Mineral residue.	Mineral residue	As ammonia.	By permanga- nate.	As nitrites.	As nitrates.	Chlorine.	Alkalinity.	Iron.	B. coli communis per ccm.	Appearance on ignition,		
0 2-v ol	30 0 0 0 0 81 81 0 0 0 0 0 0 81 0 0 0 0 0		*****		.032 .214 .068 .034 .3.584 .010 .000 .000 .000 .000 .000 .000 .00	292 1771 320 316 5 ,940 046 016 122 046 046 052 096 064 054 065 064 065 065 065 065 065 065 065 065 065 065	.012 .002 .002 .000 .000 .000 .002 .002	.040 2.600 1.600 1.600 2.000 1.600 0.000 0.000 0.800 0.800 0.800 2.6000 2.800 0.800 0.800 0.800 0.800 0.800 0.800 0.800 0.800 0.800 0.800 0.800 0.400 0.400 0.800 0.800 0.400 0.800 0.800 0.800 0.400 0.800	5.05 5.55 4.40 4.40 16.55 5.55 21.55 22.50 20.09 9.55 9.55 9.55 9.55 4.55 4.55 4.55 5.56 4.55 5.56 4.55 5.56 4.55 5.56 6.56 6	79.0 67.0 72.0 66.0 62.0 63.0 63.0 70.0 70.0 72.0 72.0 64.0 65.0 65.0 65.0 65.0 66.0 65.0 66.0 66	0.4 0.2 2.0 0.3 1.5 0.2 2.0 0.6 0.3 1.5 0.2 0.6 0.0 0.1 1.8 0.2 0.2 1.2 1.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0	0.1 0.1 0.1 0.0 0.0 0.0 0.0 0.0	No darkening. Darkened slightly. No darkening. No darkening. Slight blackening, Darkening. Darkening. No darkening. No darkening. No darkening. No darkening. No darkening. No darkening. Darkening. Darkening. Darkening. Darkening. Darkening. Darkening. Darkening. Darkening. No darkening. No darkening. No darkening. Slight darkening. No darkening. No darkening.
0 1-v 3-s 5-s 0	0 0 25 0 0 81	217	51 47	166	.012 .018 .100 .048 .000 .000	.084	.005	4.000 7.200 2.800 8.800 1.400 .320	12.0 10.0 5.0	92.0	1.7	0.1 1.0 0.1 1.0 0.0 0.0 1.0	No darkening. Slight darkening.
3-mu 2-v 2-v 3-s 4-s 3-ma 4-mu 1-ma 3-ma 4-ma 4-ma 4-ma 4-ma	81 0 0 81 81 81 81 81 81 82 25	118 108 116 121 143 99 83 102 96 98 106 104	58 52 56 58 73 36 31 35 33 42 39 49	60 56 60 63 70 63 52 67 63 56 67 55	.012 .028 .028 .008 .024 .040 .008 .014 .016 .016 .028 .028 .028	.142 .126 .130 .144 .144 .116 .116 .114 .102 .102	.006 .007 .007 .006 .006 .003 .003 .005	.160 .280 .280 .280 .280 .280 .360 .360 .280 .280 .280 .280 .280	3,5 3,5 3,5 4,0 6,5 4,0 5,0 3,5 3,5 3,5 3,5 4,0 5,0 5,0 5,0 5,0 5,0 5,0 5,0 5,0 5,0 5	56.0 55.0 56.0 56.0 49.0 47.0 51.0 40.0 38.0 38.0	0.3 0.0 0.0 0.2 0.2 0.2 0.2 0.2 0.3 0.5 1.2 0.8 1.0	0.1 0.1 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	Heavy darkening. Heavy darkening. Slight darkening. Blackening. Blackening. Blackening. Blackening.

TABLE P.-RESULTS OF ANALYSES OF SAMPLES OF WATER FROM

NO.	Þ	AT	E.		LOCALITY.	DESCRIPTION OF SOURCE.	Color.	Odor, cold.
B 4616 B 4617 B 4728 B 4729 B 4732 B 4732 B 4732 B 4736 B 4734 B 4734 B 4741 B 4742 E 1456 E 2065 E 2066	"" "" "" "" Nov. July	25, 2, 2, 2, 8, 9, 9, 15, 15, 16, 16,	190 190	······································	Trenton	Delaware river at intake	70 70 80 85 80 20 20 25 25 20 20 0 0	3-ma 3-ma 1-ma 1-ma 1-ma 1-ma 2-ma 2-ma 2-ma 2-ma 2-w 1-ma 1-ma 0 0 0 0

#### TABLE G.-BESULTS OF ANALYSES OF SAMPLES OF WATER

NO.	DATE.	LOCALITY.	NAME OF PERSON OCCUPYING PREMISES.
D 8120 D 8173 * D 8504 D 8505 C 9266 D 8086 D 8088	June 15, 1907	Little Ferry	N. B. Yahrskie Louis Kinzler Henry J. Westbrock  John H. Wedel George Clives J. H. Coles F. C. Shreve F. B. Jones
C 9273	" 1, "	Chews Landing	Chas, J. Jaggard C. S. McCullough Daniel Hagan

## CERTAIN PUBLIC SUPPLIES—PARTS PER MILLION—(Continued).

					2	ITROG	EN-					8	1.0	
	Turbidity.	Total solids.	Loss on ignition.	Mineral residue.	As ammonia.	By permanga- nate.	As nitrites.	As nitrates.	Chlorine.	Alkalinity.	Iron.	B. coli communis per ccm.	Appearance on ignition.	
5-ma	50	127	57	70	.052	.246		.680	3.0	35.0	3.5	0.1	Blackening.	
5-ma	50	102	48 35 35	54	.044	.190	.004	.680	3.5	35.0	3.5	0.1	Blackening.	
3-ma	40	100	85	65	.012	.120	.003	.400	3.5 3.5	29.0 29.0	0.6	0.1	Darkening. Darkening.	
5-ma 3-ma	40	99	39	55	.012	.122	.003	.400	3.5	32.0	0.3	0.1	Darkening.	
3-ma	40	90	39	51	.012	.122		.400	3.5	32.0	0.5	0.1	Darkening.	
4-ma	25	78	28	50	.004	.110		.400	3.5	21.0	0.5	1.0	Slight darkening.	
4-ma	25	78 88	20	68	.004	.110		.400	3.5	21.0	1.2	0.1	Slight blackening	
5-ma	35	152	31	121	.004	.158		.400	3.5	25.0	3.5	0.1	Heavy blackening	
4-ma	45	184	24	160	.004	.158		.400	3.5	25.0	3.8	0.1	Heavy darkening.	
4-W	sl	83	21	62	.004	.106		.400	3.0	31.0	0.4	1.0	Darkening,	
4-W	81	84	25	59	.004	.106	.002	.400	3.0	31.0	0.3	1.0	Darkening.	
2-ma	s1	84	34	50	.004	.096	.002	.400	3.0	31.0	0.3	1.0	Darkening.	
2-ma	sl	85	26	59	.004	.096	.002	.400	3.0	31.0	0.2	1.0	Darkening.	
0	5	553	232	321	1.254	.024		.000	180.5	86.0	0.7	10.0	Smoked.	
0	s1	596	424	172	1.210	.048		.080	178.0	91.0	2.5	0.0		
0	0	569	118	451	1,192		.005	.040	207.5	154.0	0.3	0.0		
0	s1	624	405	219	1.216		.002	.040	200.5	112.0	1.3	0.0	Slight darkening.	
2-ma	0	66	31	35	.018	.100	.001	.200	4.4	17.0	1.5	1.0	Brownish white.	

#### USED ON DAIRY PREMISES-PARTS PER MILLION.

		== 				NITI	ROGEN-	- 1		
DESCRIPTION OF SOURCE.	Color.	Odor, cold.	Odor, hot.	Turbidity.	As ammonia.	By permanga- nate.	As nitrites.	As nitrates.	Chlorine.	B. coli communis per cem.
Spring, 100 feet from manure pile Dug well, 5 feet to surface of water Driven well, 90 feet deep	   	0 0 0	0 0 0			1 010	.007 .010 .002	2.8 40.0 1.2		0.1
Dug well, in back yard Dug well, in shed kitchen Dug well, 30 feet deep Dug well, 18 feet deep Dug well, 20 to 30 feet deep Well on milkman's premises	0	0 0 2-0	0 0 0 0 0 2-0	10	.004	.020 .020 .040		8.0 8.8 4.8	14.0 11.1 92.0 12.5	0.0 0.0 10.0
Dug well, 25 feet deep	0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 2-w	0	.046 .052 .870 .000 .012	.092 .076 .092 .200 .078 .034 	.030 .002 .080 .007 .018 .005	20.0 17.6 16.0 20.0 9.6	43.0 28.0 64.5 43.5 52.0	1.0 0.0 0.1 1.0 1.0

TABLE G-RESULTS OF ANALYSES OF SAMPLES OF WATER

NO.		DA1	re.	LOCALITY.	NAME OF PERSON OCCUPYING PREMISES.
C 8348 C 8350 C 8351	" 1	7, 7, 7,	007	I .	S. B. Taylor Mrs. Mary E. Sawyer James Needles Wm. C. Bacon Daniel Schellenger
			006."	ESSEX CO.—	
E 2093 D 8251	Sept. 1: Feb. 1	3, 19 4,	907 ''	Fairneid	Mrs. Fitzgibbons. R. Woolverton.
•	Jan. 8	1, 19	907	Hunson co —	Wm. H. Harney
D 8211 D 8212 D 8213	Jan. 2	2, 19 2,	907	HUNTERDON CO.— Annandale Clinton	John A. Schuyler
E 2005 E 2078 E 2051 E 1756 E 1755	July " 1 Mar. 2	5, 2, 1, 9,	907	Harts Corner	. Walter Campbell
E 1489 E 1496	Apr. 1 May 1 June 1 " 1 " 1	9, 0, 2, 2, 2,	· · · · · · · · · · · · · · · · · · ·	Hopewell Township	Harry Hunt H. E. Maddock Smith C. Vanseious. Wm. Hildebrand Wm. Thompson A. H. Burroughs.
E 2084 E 2050 E 1761 B 4536 E 1858 E 1859	July Apr. Sept. 1 Nov.	5, 1, 2, 2, 7, 19	" " 906.	Lawrence Township	Geo. Moore. Robt. C. Oliphant. Edw. C. Bowers. David S. Hill
E 1753 E 2045	Apr. 2 July Mar. 2 June 1	7, 7, 6, 19 5, 7,	907		. Chas. F. Walker
D 8433	" 1 Apr. 2	2, 2, 2, 6,		Washington Township West Windsor Township	Wm. B. Fort. G. A. Miller. W. B. Fort. Thomas Dorman. H. N. Miller. Rosteen Brown. Elmer E. Reed.
E 1744		1,	"	" " "	L. B. Reed

USED ON DAIRY PREMISES-PARTS PER MILLION-(Continued).

	_									
•		Ī ·				NITI	ROGEN-			m2
DESCRIPTION OF SOURCE.	Color.	Odor, cold.	Odor, hot.	Turbidity.	As ammonia.	By permanga- nate.	As nitrites.	As nitrates.	Chlorine.	B. coli communi per ccm.
Dug well, 18 feet deep Driven well, 45 feet from privy Dug well, 20 feet deep Driven well, 100 feet from privy Driven well, 43 feet deep	0	0 1-e 0 0 0	0 1-e 0 0	  s1	.026 .016	.140 .042 .086 .020 .024	.006 .004 .006 .006	18.0 2.8 2.2 0.6 2.0	72.0 14.5 28.0 5.0 18.0	1.0 0.0 0.0
Dug well, 36 feet deep		<b>o</b> .	0		.000	.084	.007	8.0	26.5	1.0
Dug well, 55 feet deep Spring, 50 feet from privy			0	0	.028 .006	.056 .030	.007 .008	32.0 1.0	36.5 3.5	
Dug well, 21 feet deep		0	0		.000	.022	.001	10.0	37.0	1.0
Dug well, 36 feet from privy Chain well, 12 yards from privy		0	0		.018 .184	.078 .080	.005 .007	14.0 4.4	127.0 65.5	1.0 0.1
Spring, 10 feet from drain		0 0 0	0 0 0	 		 .036 .122	.002 .003 .002	4.0 8.8 2.8	34.5	10.0 10.0 1.0
Driven well, 145 feet deep. Dug well, 100 feet from privy. Well, 60 feet from privy. Well, 60 feet from privy. Dug well, 35 feet deep. Well, 40 feet from privy. Cistern. Spring, in field. Dug well, 76 feet from privy. Driven well, 96 feet deep. Driven well, 60 feet from privy. Driven well, 45 feet deep. Dug well, 25 feet deep. Spring, 500 feet from privy. Driven well, 90 feet deep. Dug well, 35 feet deep. Spring, 40 feet, from Jacob's creek. Spring, 40 feet, from privy. Driven well, 26 feet deep. Dug well, 27 feet deep. Dug well, 28 feet deep. Dug well, 26 feet deep. Dug well, 18 feet deep. Dug well, 18 feet deep. Dug well, 10 feet from privy. Driven well, 55 feet deep. Dug well, 12 feet from privy. Driven well, 55 feet deep. Dug well, 15 feet from kitchen. Driven well, 55 feet deep. Well in area way. Dug well, 20 feet deep. Dug well, 20 feet deep. Dug well, 20 feet deep. Dug well, 27 feet from privy. Dug well, 175 feet from privy. Dug well, 175 feet from privy.	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 1-V 3-W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 s1   0 0 0 0  s1 	.000 .004 .052 .014 .090 .006 .006 .000 .000 .000 .000 .000	.108 .246 .036 .040 .020 .014 .060 .082 .114 .006 .056 .068 .018 .082 .000 .044 .086 .028 .036 .040 .040 .056 .056 .056 .056 .056 .056 .056 .05	.002 .001 .001 .020 .000 .000 .000 .001 .001	2.0 6.0 1.6 19.2 2.4 4.0 8.0 8.0 8.0 8.0 1.2 4.8 5.2 4.8 0.4 4.0 6.0 6.0 6.0 6.0 6.2 4.4 4.0	4.5 5.5 7.0 19.0 19.0 179.0 56.5 9.0 29.5 38.0 48.5 58.0 91.0 43.5 58.0 91.0 71.5	1.0 1.0 0.1 0.1 0.1 0.0 0.0 0.0
Dug well, 20 feet deep Dug well, 75 feet from privy Dug well, 150 feet from privy	 	0	0		.036	.078 .094 .124	.005 .070 .003	14.0 18.0 4.8	88.0 14.0	1.0 0.0 1.0

TABLE G.—RESULTS OF ANALYSES OF SAMPLES OF WATER

<b>10</b> .	DATE.				L	OCALI	TY.		NAME OF PERSON OCCUPYING PREMISES.							
	Nov.	5,	190	6	MERCER (	CO. (Co	Township	· ›								
1455	66 100-1-	5.	**			66	"	• • • • •	L. B. Reed							
1748	Peb.	11,	190	Y		"	"	••••	Elmer E. Reed							
1450	Apr. Nov.	<b>20</b> 5	190	R	**	**	••	• • • • •	Albert Groves							
1749	Feb.	11.	190	7	**	44	+4	• • • • •	11 11							
	Apr.		**		46	44	**		1 11							
1757	i.	20.	**		**	••	**	••••	Gideon Applegate							
1758	**	20,	"		**	4.6	**		1 " "							
8431		26,	**		••	"			Henry Disborough							
4978	Sept.	17,	••	•••••	••	••	**		Fred. A. Craig							
	ì				MIDDLES	ry co										
8210	Jan.	21,	190	7			k Townsh	in	Henry Wainsdorsen							
8199	**	21.	-11		46	**	**		Henry Wainsdorsen							
8196		21,	**	************	44	**	**		Harry Swifter							
8209	"	21,	**		**	**	**		Samuel Herman							
8196	44	23,	"			44	44		Benj. Shutzman							
8197	"	28,	"	***************************************	""	**	"	••								
8205		24,	::	•••••				••	Elmer Van Deusen							
8207	١.	31,	**			**	**	••	David Wilson							
	Feb. Jan.				Milltov		••	••	Herman Franzblau							
	Feb.	8,	44		Million		•••••••	•••••								
8225	Feb.	8.	66		**				John H. Binnerman							
	Маг.		**		44				George Foster							
	Jan.		**	***************************************	New B	runswi	ck		!Barnett Cohen							
	Feb.		"	************		**			Michael Anderson							
1915	June	11,	"		New M	arket			W. H. Dunbar							
	Jan.	25,	"		Perth A	/mboy			Stephen Senior							
8208	::	25,					•••••	•••••								
8206 8204	1 ::	31,					······	•••••	Gtombon Genton							
	Feb.	81,						•••••	Stephen Senior Edwin Nelson							
8243	reb.	12, 12.	"		**				Israel Feldman							
8222		8,			Sevrev				Hans Peterson							
8221	44	8.	"		1				Mac Coal Decum							
8330	Mar.	22,	44		"				August Rhodes Thomas W. Buckelow Wm. H. Jemison Jas. Harris.							
8202	Jan.	29,	**		South	Brunsw	rick Twp.		Thomas W. Buckelow							
8860	Apr.	5,	44		"		. "··		Wm. H. Jemison.							
8834	Aug.		"		ا ہ"۔ ا	- "	" .	••••	Jas. Harris							
8223	Feb.	8,	**	·······	South	River	· · · · · · · · · · · · · · · · · · ·		Geo. T. Forty							
8245 8244		12,			Woodb	nage	·····	•••••	Geo. T. Forty							
0244		12,				•		•••••	isaac and David Flood							
	-				MONMOU	TH CO	. <del></del>									
8601	July	11,	190	7	Bailey	s Corn	e <b>r</b>									
8603	٠٠	11,	"		" "	"										
8600		11,	**		_ ".	. "	•••••		J. C. Windsor & Son							
	May	10,	"	•••••	Farmi	igaale	•••••		J. C. Windsor & Son							
8458		10,			1		• • • • • • • • • • • • • • • • • • • •	•••••	Mrs. F. H. Snattuck							
8482 8465		31, 22.	44	•••••	Gland	la.	•••••	•••••	Mrs. F. H. Shattuck. W. H. Farmer. Geo. Donahay. John W. Martin.							
8467		22,	**		dienia	71 <b>6.</b>	•••••	••••	Ichn W Martin							
8466	:	23.	**		"	•••••		•••••	offi W. Marun							
8481	"	31.	46						Louis Hulick							
8460	**	10.			Hamil	on			William Jackson							
	Oct.	14,	"		Howel	1			J. L. Pittenger F. C. Pittenger W. B. Van Devern							
8907	10,,	14.	**	************	1		•• •••••		F. C. Pittenger.							
		14.														

# USED ON DAIRY PREMISES—PARTS PER MILLION—(Continued).

						NITE	NITROGEN-			32
DESCRIPTION OF SOURCE.	Color.	Odor, cold.	Odor, hot.	Turbidity.	As ammonia.	By permanga- nate.	As nitrites.	As nitrates.	Chlorine.	B. coli communis
Dug well, 18 feet deep Dug well, 24 feet deep		0	0			.052	.005	8.0	64.0	
Dug well, 24 feet deep		0 0 1-0 0	0 0 1-0 0		.012 .006 .044 .002	.060 .076 .018	.008 .002 .010 .002 .002	2.4 1.6 8.0 7.2 40.0	8.0 9.5 15.5 20.0 65.5	0. 0.
Dug well, 24 feet deep. Well, 30 feet deep. Dug well, 100 feet from privy. Dug well, 22 feet deep Well, 100 feet from privy. Driven well, 58 feet deep Dug well, near barnyard. Well, under kitchen Dug well, 40 feet deep Driven well, 80 feet deep		0 0	0 0 0	  s1	.048 .012 .002 .004 .034	.020 .060 .040 .058	.060 .002 .002 .002 .001	2.8 2.8 1.4 1.6 0.6	21.0	0. 10. 0.
			i de	81			*			
Dug well, 26 feet deep		1-e 0 2-e	1-е 0 2-е		.006 .006	.052 .052	.003	2.8 6.0 12.0	11.5 27.5	
Dug well, 50 feet deep		1-w 0 0	0 1-w 0		.002 .012 .016 .026	.072	.007 .005 .002 .006	0.8 2.0 0.2 0.4	7.0 13.5 285.5	0.
oug well, 25 feet deep. oug well, 26 feet deep. oug well, 25 feet deep. oug well, 26 feet deep. oug well, 8 feet deep. opring		0 0	0		.006 .006 .012	.040 .086 .034	.000	0.2 1.6 2.4	14.0 4.5 74.0	1 0 10
ong well 60 feet from privy	***	1-0	0 0 1-e 0		.012	.056 .040 .010 .084	.002 .003 .000 .002	4.4 8.0 4.0 16.0	15.5 24.0 38.0 223.5	0
ong well, 87 feet from privy			0 2-0 0		.002	.040 .178 .028	.002 .200 .002	0.6 0.4 3.6	22.0 25.0 74.5	0
lig well, 37 feet deep		0 1-v 0	0 1-v 0	***	.054 .230	.120	.000 .000 .007	10.0 2.4 12.0	45.0 28.5 30.0 21.0	0
Vell, 50 feet from privy		0	0		.024	.116	.004 .070 .004 .003	2.8 16.0 16.0 24.0	95.5 33.5 87.5	0
ong well, 18 feet deep ong well, 54 feet from privy		1-sw 1-e 0	0 0	***	.002	.130 .088 .026	.002 .002 .000	16.0 4.8 2.8	85.5 295.5 5.5	10
ong well, 12 feet deep ong well, 95 feet from privy. ong well, 81 feet from privy. ong well, 81 feet from privy. ong well, 18 feet deep ong well, 54 feet from privy. ong well, 50 feet deep ong well, 72 feet deep vell, 125 feet from privy. ong well, 13 feet deep ong well, 12 feet deep		0 0	0 0	0		.078 .082 .030 .020	.002 .005 .005 .008	0.1 32.0 0.8 8.0	42.0 118.0 19.0 19.5	1 0
ong well, 30 feet deep			1-v	0	000		,001	0.4	36.0	10
ng well, 26 feet deep	0	0	0 0	0	.000 .004 .072	.070	.004 .002 .009	8.8 9.6 14.0	\$2.5 41.5 31.0	0
org well, 26 feet deep org well, 40 feet deep org well, 15 feet from stable org well, 18 feet deep org well, 18 feet deep org well, 18 feet deep org well, 12 feet deep org well, 25 feet deep org well, 40 feet from privy org well, 40 feet from privy org well, 40 feet feep org well, 45 feet deep org well, 25 feet deep		0	0 0		.072	.090	.007	2.2 8.0 2.0 2.0	25.5 10.0 53.0 25.5	0
ng well, 35 feet deep		0	0 0		.002 .008 .008	.040	.001 .002 .002 .001	10.0 0.6 0.8	35.0 31.5 11.0	0
oug well, 15 feet deep	0	1-w 0	2-w		.000	.036	.001 .002 .005	0.4 8.0 2.6	26.0	10

TABLE G.—RESULTS OF ANALYSES OF SAMPLES OF WATER

						,	•		
NO.		DA	<b>TE</b>			Ì	OCALIT	Y.	NAME OF PERSON OCCUPYING PREMISES.
								•	
	<u>-</u>				-			·	
D 8909	Oct.	14,			MO	Howel	TH CO.		Witland Sutphin
	May 3					Lower	Squanki etown	um	Mrs. E. Van Schoick
D 8500	"	10,	"			•			J. Sanborn
D 8576 D 8894	Sept.	5, 24.	"			44	66	ip	A W King
D 8573	July	5,	**			"	"		
D 8574 D 8575		5, 5,	**						
D 8506	June	17,	"			Scobe	yville		Frank Hance
D 8507 D 8508		18, 17,	"		١.	. G	170-11-	• • • • • • • • • • • • • • • • • • • •	P. H. Bennett
	July		"			Wall 7	ı ranıs Townshir		P. H. Bennett
D 8577	"	5,	**			Waysi	de		
					oc	EAN C	20.—		•
				·	"	Point	Pleasant		Hotel Beacon-by-the-Sea
D 8893	Sept.	24,		i		Poplar	г	·····	W. S. Hunt
					SA	LEM C	:o.—		
C 7872 D 8089	Nov.	30, 2.	1906			Elmer	'		B. W. Thompson.
	Mar.		1907			Salem			· · · · · · · · · · · · · · · · · · ·
C 8220		15,	46	•••••		. 44			
C 8219 C 8226		15, 18.	"	•••••••	١.	"			
C 8225	"	18,	"			44	*******		
C 8224 C 8223		18, 18,	66		1				B. Warren Harisy
C 8247	66	21.	66	••••••		. 44			John Loper Thomas Reeves
C 8248		21,	"			**		• • • • • • • • • • • • • • • • • • • •	Samuel Little
C 8250 C 8251		25, 25.	"		l	44			Nathaniel Cuff Samuel P. Farnkoff
C 8271	"	29,	44			"			Frank Harris
C 8269 C 8267	::	29, 29, 27, 27,	"		l	"			
C 8265		27,	4.6			**			Breslin Brothers
C 8266 C 8264		27, 27.	"		١.	. 44			Morris G. ActonLindsey Johnson
C 8270		29.	46			. "			
C 8294	Apr.	5, 5,	"		1	"			Eli Wildy
C 8295 C 8296		ə, 5.	"		1	**			Wm. W. Griscom Isaiah Hoglin
C 8354	"	20,	44			. 44			C. H. Reeves
C 8353 C 8352		20, 20,	"		1	"			B. Warren Harvey
	May	3,	"			44			John Loper
C 8389		3,	. "			"			Nathaniel Cuff
C 8391 C 8392	"	3,	"		1	**			Morris G. Acton
C 8393	"	3,	"		1	. "	•		Breslin Brothers
C 8394 C 8390	1	13, 24.	"			**			John A. Crispin Samuel P. Farnkoff Ely Weldy
C 8478	"	24,	"			- "			Ely Weldy
C 7785 C 7787	Nov.	2, 2.	1900	3	1.	Wood	stown		
			190	7					

# USED ON DAIRY PREMISES-PARTS PER MILLION-(Continued).

					- 4	NITR	+		is	
DESCRIPTION OF SOURCE.	Color.	Odor, cold.	Odor, hot.	Turbidity.	As ammonia.	By permanga- nate.	As nitrites.	As nitrates.	Chlorine.	B, coli communis
Dug well, 25 feet deep Dug well, 18 feet deep Dug well, 35 feet deep Dug 50 feet deep Dug 20 feet deep Dug well, 35 feet deep Dug well, 15 feet deep Driven well, 15 feet deep Driven well, 15 feet deep Dug well, 25 feet deep Well, 32 feet deep Well, drawn from storage tank Well, drawn from storage tank Dug well, 30 feet deep Dug well, 30 feet deep Dug well, 36 feet deep Dug well, 16 feet deep	000000000000000000000000000000000000000	1-p 0 0 2-0 0 0 0 0 0 0 0 0 1-ma	1p 0 0 20 0 0 0 0 0 0 0 1-ma 1-ma	0	.080 .128 .030 .002 .004 .010 .126 .008 .006 .004	.028 .040 .104 	.014 .030 .028 .008 .002 .004 .002 .001 .002 .002	10.4 6.0 14.0 1.8 8.0 8.8 44.0 0.08 4.8 4.8 8.8 8.8 14.0 4.6 12.0	14.5 18.5 45.5 19.0 89.5 12.0 116.5 45.0 16.5 11.5 84.5 40.5 25.0	0. 1. 0. 1. 0. 0. 0.
Driven well, 10 or 12 feet deep Dug well, 20 feet deep	C	3-sp 0	5-sp 0		.762 .000	.044 .104	.006 .004	0.08 8.8	52.0 51.0	
Dug well, 15 feet deep  Dug well, 16 feet deep  Dug well, 18 feet deep  Dug well, about 20 feet deep  Dug well, about 20 feet deep  Dug well, about 15 feet deep  Dug well, 12 feet deep  Dug well, 18 feet deep  Dug well, 14 feet deep  Dug well, 14 feet deep  Dug well, 14 feet deep  Dug well, 18 feet deep  Dug well, 18 feet deep  Dug well, 18 feet deep  Dug well, 15 feet deep  Dug well, 15 feet deep  Dug well, 125 feet from privy  Dug well, 126 feet deep  Dug well, 18 feet deep  Dug well, 16 feet deep  Dug well, 15 feet from privy.  Dug well, 15 feet deep  Dug well, 15 feet deep  Dug well, 16 feet deep  Dug well, 15 feet deep  Dug well, 15 feet deep  Dug well, 18 feet deep  Dug well, 15 feet deep  Dug well, 16 feet deep  Dug well, 17 feet deep  Dug well, 18 feet deep  Dug well, 19 feet deep  Dug well, 19 feet deep  Dug well, 20 feet		0 0 0 1 - V 0 1 - V 1 - V 2 - e 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 1 - V 1 - V 2 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		.054 .006 .008 .002 .450 .000 .016 .000 .014 .190 .000 .000 .000 .000 .000 .000 .000	.000 .112 .086 .144 .156 .250 .052 .036 .140 .066 .100 .144 .046 .068 .074 .058 .380 .100 .058	.002 .001 .000 .000 .000 .000 .000 .000	6.0	18.0 67.0 88.0 125.5 125.5 123.0 79.0 215.0 215.0 225.5 88.5 88.5 88.5 73.0 72.0 72.0 73.5 88.5 132.5	0. 0. 0. 10. 10. 10. 10. 10. 10. 10. 10.

<sup>\*</sup>Too high to read.

TABLE G.—RESULTS OF ANALYSES OF SAMPLES OF WATER

NO.	DATE.	LOCALITY.	NAME OF PERSON OCCUPYING PREMISES.
D 8833	May 11, "	Warrenville	F. D. Jakeway
E 1495 E 1795 E 1913 D 8499 G 269 G 267 G 271 G 270	May 1, 1907 June 1, " 20, "	UNION CO.— Cranford Fanwood Kenilworth Union	August Behnert Edward Harding George Bronell John Shallcross. E. V. Gaitwait. Marcus Levin Mrs. Mary Brady. Theodore Goeken. Peter Ernst.

# USED ON DAIBY PREMISES-PARTS PER MILLION-(Continued).

							NITR	OGEN-	-		8
DESCRIPTION OF SOURCE.	Color.	Odor, cold.		Odor, hot.	Tarbidity.	As ammonia.	By permanga- nate.	As nitrites.	As nitrates,	Chlorine,	B. coli communis per cem.
Dug well, near stable	0		0 0		0	,000	.086	.040 .002 .002	22.2 0.12 0.6	7.5	1.0 0.1 0.1
Spring in cellar, about 15 feet from privy Spring, 200 feet from privy		0	0				.092	.002	1.8 2.2	23.5 2.0	0.1
Driven well, 72 feet deep	0 0 0	0 0 0 0 0	0 0 0 0 0 0 0	VI.II	81 0 0	.002 .000 .062 .066 .266	.020 .016 .068 .030 .054 .138 .224 .052	.000 .002 .000 .060 .010 .024 .100	1.0 3.2 1.6 6.0 8.0 16.0 18.0 4.8	3.5	0.1 0.1 1.0 1.0

# Abbreviations used in describing odors of water:

v-vegetable.

ma-marshy.

mo-mouldy.

mu-musty.

w-woody.

p-peaty.

s-sewage.

ol—oily.

sp—sulphide.

o—offensive.

e earthy.

sw-sweet.

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ain	B. coli commu per ccm.	0.0	0.010000 0.0000000000000000000000000000	0.1	0.0	2222 2222 2225 2225 225 225 255 255 255
	Срјоцив.	116.0	88.5 0.1 88.5 0.1 88.5 1.0 15.85 1.0 19.5 10.0 10.0 0.1 28.0 10.0 85.0 0.0	2.5	87.0 69.0 6.5	1.5 10.0 12.5 10.0 12.5 10.0 1.5 10.0 1.5 10.0 4.0 10.0 4.0 10.0 4.0 10.0 4.0 10.0 4.0 10.0
	As nitrates.	12 9.9 9.8	0004222144 88888881884	4.80	0.85 0.88 0.88	00000000000000000000000000000000000000
EN-	.səthtin sA	070.	6666666666	.00	90.0.0. 20.00.	, 999999999999999999999999999999999999
NITROGEN-	By perman- ganate.	8.2	9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.	.032	.090 .090 .082	.078 .078 .070 .032 .032 .066
	.sinomms sA	88	9.000000000000000000000000000000000000	96	869. 440.	099999999999999999999999999999999999999
	Turbidity.	00	00000	•	s-1 s-1	0 1 -8 -0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	Odor, hot.		0 0 0 0 0 8-fishy 0 1-e 0	0	000	0 0 0 2-peaty 1-musty 0 0 0 0 1-v
	Odor, cold.	. 00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<u> </u>	, 000 000	00 00 00 01 1-peaty 01 00 00 00 01 00 01 00
∥.	Color,	00	00000000			
	DESCRIPTION OF SOURCE.	Driven well, 27 feet deep	Driven well, 122 feet deep	Well, dug 35 feet, driven 15 feet	Driven well, 100 feet deep Dug well, 13 feet deep Driven well, 90 feet deep	Spring, in field, 500 feet from privy.  Driven well, 40 feet deep.  Drawell, 15 feet deep.  Spring, for evennery building.  Burbuling spring, boxed in.  Driven well, 78 feet deep.  Driven well, 22 feet deep.  Black creek.
	LOCALITY.	CUMBERLAND CO.— Bridgeton	HUNTERDON CO.— Baptistown,  Clinton Flemington Lebanon Locktown Sunnyside	MERCER CO.— Robbinsville	Salem Woodstown	SUSSEX CO.— Augusta Baleville Branchville Clove Clove Hamburg Hamburg Lafayette McAfee
	DATE.	Sept. 23, 1907	B 4613 Sept. 25, 1907	B 4986 Sept. 26, 1907	Sept. 16, 1907 16, " 16, "	E1988 Aug. 16, 1907
	NO.	B 4606 B 4607	B 4613 B 4526 B 4526 B 4526 E 1850 B 4612 B 4612 B 4523 B 4612	B 4986	B 4537 B 4539 B 4638	E 1938 E 1944 E 1940 E 1950 E 1950 E 1967 E 1967 E 1967 E 1968 E 1968 E 1968 E 1968

TABLE H.-RESULTS OF ANALYSES OF SAMPLES OF WATER USED ON CREAMERY PREMISES-PARTS PER MILLION-(Continued).

	_			
stut	B. coli commu per ccm.	00000000000	500000000000000000000000000000000000000	0.0000000000
<del></del> -	Сріоніве.	40.804.404.808.80		28.25.25.25.25.25.25.25.25.25.25.25.25.25.
	As nitrates.	48.48.88.89.888888888888888888888888888	0.000000000000000000000000000000000000	888888888888888888888888888888888888888
EN-	As nitrites.	<u> </u>	<u> </u>	55555555555555555555555555555555555555
NITROGEN-	By perman- ganate.	22 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	244 866 866 866 866 866 866 866 866 866 8	900 100 100 100 100 100 100 100 100 100
	.sinomms sA	88814008999	666.000 666.00	8 <u>8</u> 88888888
	Turbidity.	<u> </u>		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	Odor, hot.	22-woody 00 00 00 01-woody 00	0 0 0 0 1-woody 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 2-peaty 0 0 0 0 0 0 2-woody
	Odor, cold.	200- 301-0ily 000- 000- 001-woody 000- 000-	00 00 00 01 01 01 00 01 01 00 00	000 000 000 000 000 000 000 000 251-woody
	Color.	25000000	2000000000	<u></u>
	DESCRIPTION OF SOURCE		stillwater Spring rising on hill behind creamery sussex Kunning stream, origin Carpenter's lake. Spring along highway Lake Rutherford City supply Wartswood Hill spring, one quarter mile from creamery. Vernon Hill spring, one quarter mile from creamery. Narbase Spring, 900 feet from creamery Nordruff's Gap. Driven well, 35 feet deep.	Spring, 50 feet, in rear of creamery Spring, in creamery building, boxed in. Driven well, 45 feet deep. Public suppresentation, boxed in. Spring, under creamery, boxed in. String, no cooling from White lake. Stream coming from White lake. Spring, boxed in. Well, 100 feet, outside creamery.
	LOCALITY	SON	Stillwater Sussex  Swartswood Vall Vernon Warbasse Woodruff's Gap	WARREN CO.— Allamuchy Blairstown Hacketststown Long Bridge Markeboro Vall Tranquility
	DATE.	Aug. 22, 1907	84// (96.1 %) E 1986 Aug. 16, E 1985 Aug. 16, E 1985 Aug. 16, E 1987 A 7580 A 16, E 1987 A 16, E 1987 A 16, E 1988 A 16, E 1988 A 16, E 1988 A 16, E 1988 A 16,	B 4776 Oct. 9, 1907 B 1964 Aug. 22 B 1960 C. 22 B 1963 C. 22 B 1963 C. 22 B 1963 Cot. 9 C B 1964 Oct. 9 C B 1966 Aug. 22 B 1966 Aug. 22 B 1967 C. 22 B 1967 C. 22
·	NO.	A 7596 Aug. E 1946 E 1953 E 1953 E 1953 E 1953 E 1953 E 1955	EE 1932 EE 1932 EE EE 1947 EE 1947 EE 1953 EE 1953 EE 1953	### 1967

TABLE I.—BESULTS OF ANALYSES OF SAMPLES OF WATER

=		==	==	-		
NO.	l 'n	AT	E.		LOCALITY.	NAME OF PERSON
	_				200112111.	OCCUPYING PREMISES.
						•
	<u></u>			_	<del></del>	
E 1780 E 1600		21, 2,	190	7	Alvea's pond	
E 1604	July	22.	::		" 2 Sylvan avenue	John Richardson
E 1605 E 1749	Feb.	22, 18,	**	•••	Belvidere	O. H. McMurtrie
B 4546 E 1740	Sept.	10,	"		Beverly, 18 Second street.	Mary Marillana
E 1741	**	1,	"	•••	Belvidere Beverly, 18 Second street Bloomfield, 16 Sycamore street.	Henry Schuland
E 1746	 April	13, 24.	"	•••	44	Consolidated Pin Co
E 2095	July	26,	•"			
E 1779 E 1778	Mar.	11,	"	•••	" 17 Vine street	Thomas Dillon,
E 1776	"	11,	"		" 14 Vine street	B. Price.
E 1777 E 2022		8, 12,	"		" James street	Mr. Hickey. B. Price. Mrs. Brower. Mr. Cohen
E 2021	"	12,	"	•••	" Broad street	Mr. Cohen
E 2094 E 2096		19, 21,	"	•••	" 378 Broad street	
E 2097	Sept.	23,	"		'' 39 Mill street	Michael Karenowski
E 1459 E 1774	April	2, 15.	64	•••	Bordentown, 44 Spring street Brainards	Andrew Raisley
T3 7.200	ı	9, 24.	"	•••	Burlington	i
E 1788 B 4781		8,	44	•••	" 81 Walnut street	Mr. McConnell
E 2085	July April	15,	"	•••		
E 1872 B 4532	Mar.	21,	"		Califton, Simon's pond	
B 4532 B 4994	Sept.	2, 15,	"	•••	Dover, 23 Prospect street	I. W. Condict
B 4994 E 1449	Dec.	7.	1906	3	Fair Haven	Mrs. Alfred Trafford
E 1987 B 4508		20, 17,	1907		Floronge Third street	Thomas Foulks
B 4509 E 1646		17, 12,	"	•••	"Second street	Dominic Agabito
E 1645	Sept.	24,	44		" 20 Bowne avenue	Patrick Baggett
E 1773 E 1729		6, 21,	44	•••	Hackensack, 241 Park street. Haledon, Bridge's pond. "Haledon Ice Co	
E 1731	""	21,	"		" Haledon Ice Co	Peter Hopper
E 1734 E 1728	"	21, 21,	"	•••	Henderson's pond	Max Webers
E 1995	Aug.	13,	"		Henderson's pond. Hopewell, Hart avenue. " Model avenue. " Hart avenue.	A. S. Golden
E 1997 E 1996	**	13, 13,	**		" Hart avenue	Wm. E. Golden
B 4523 B 4524	Sept.	4	"		Lambertville, Coryelle street	Mre Hert
B 4525	"	4,	"		" Swan street	Mrs. Hennessy
B 4551 B 4552	".	4,	"		" 91 Swan etroot	Mrs. Masterson
B 4553	."	4,	"		" Swan street	The street stree
B 4569 B 4826	Oct.	18, 23,	**	•••	" Quarry street	Mrs. Michael Carmody
B 4827	Man.	23,	"		" Franklin street	James McElroy
E 1781 E 2030		4, 27,	"	:::	Lebanon	H. D. Dickson
E 2029	"	27, 21,	"		Tittle Wells Highland lake	"
E 1874 E 1727	Dec.	17,	1906	3'	Madison, 48 Central avenue	
E 2057 E 2058	Aug.	9, 9,	1907	/····	" 12 North street	Mrs. Redding
B 4737	Oct.	9,	44		Mercerville, Main street	Dr. J. Pierepont
E 1497 E 1498	May July	25, 19,	"		" 113 Main street. " Swan street. " " " " " " " " " " " " " " " " " " "	Mrs. Allen Cole
E 1929	Aug.	13,	"		Mount Holly, Water and Main streets	Richard Lamp
B 4625	Oct.	3,	"	•••	New Brunswick, Baldwin & Remsen aves	l,

TAKEN FROM PRIVATE SUPPLIES-PARTS PER MILLION.

					N	ITBO	GEN-	-	si.
DESCRIPTION OF SOURCE.	Color.	Odor, cold.	Odor, hot.	Turbidity.	As ammonia.	By permanga- nate.	As nitrites.	As nitrates.	Chlorine.  B. coll communis per ccm.
Dug well, 18 feet deep Driven well, 20 feet Cistern, 10 feet deep Dug well, 24 feet deep Dug well, 24 feet deep Dug well, 25 feet deep Driven well, 180 feet deep Driven well, 186 feet deep Dug well, 40 feet deep Dug well, 40 feet deep Dug well, 20 feet deep Driven well, 10 feet from rear of house Driven well, 50 feet deep Driven well,	-:::00::0:::::00:0000::::::00::00::00::	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 1 4-drain 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	: :00 :50 : : : :0 sl0070 : : : :00 : :sl0 :0000 sl : :		080 060 086 086 086 086 086 086		1.00 18.40 1.00 18.20 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	5.5 1.0 63.0 0.1 35.5 10.0 35.5 10.0 38.0 10.0 9.0 1.0 13.0 10.0 13.0 10.0 13.0 10.0 13.0 10.0 10.0 10.0 10.0 10.0 10.5 0.0 10.5 0.0 10.0 0.1 10.0 0.1
Spring, 4 feet deep. Dug well, 10 feet deep. Lee pond (spring). Dug well, 20 feet deep. Dug well, 25 feet deep. Dug well, 25 feet deep. Dug well, 40 feet deep. Spring. Dug well, 7½ feet deep. Dug well, 15 feet deep. Dug well, 15 feet deep. Dug well, 15 feet deep.	: : : :000 :000	0 2-woody 0 0 1-v 1-marshy 0 2-v 1-v 0	0 2-woody 0 0 1-v 1-marshy 0 2-v 1-v 0	:::::::::::::::::::::::::::::::::::::::	.004 .058 .008 .004 .006 .004 .002 .004	.034 .034 .046 .088 .088 .098 .048	.003 .002 .002 .003 .003 .002 .001 .002	1.60 2.00 0.16 2.40 4.80 2.60 .80 8.00 5.20 19.20	5.5 1.0 6.5 0.1 8.0 60.0 1.0 15.5 1.0 44.0 1.0 2.5 10.0 45.5 1.0 12.0 0.1 49.5 0.1 71.0 1.0

TABLE I.—RESULTS OF ANALYSES OF SAMPLES OF WATER

	· · · · · · · · · · · · · · · · · · ·		
NO.	DATE.	LOCALITY.	NAME OF PERSON OCCUPYING PREMISES.
			!
	Oct. 3, 1907 Mar. 21, "	New Brunswick, 138 Remsen avenue.  Newport, Main street.  North Paterson, ice pond, No. 1  North Plainfield, Johnson's drive.  Paterson	Mike Phillips
E 1873 E 1873	1 21, " 1 14, "	North Plainfield, Johnson's drive	Chas. C. Wheeler
E 1924	Apr. 26, " June 20, "	PatersonPaterson, jute mill	D. Kubsien
	" 20, " Sept. 6, "	Pedricktown	P. P. Sullivan
B 4589 B 4588	6, " 6, "	Perth Amboy, 40 Cortland street	Joseph KishJohn Zaremba
B 4593 E 1889	Oct. 13, " Feb. 8, "	" " 188 High street Plainfield, Valley and Clinton avenues	Charles K. Seaman
E 1882 E 1891	Apr. 9, "	Paterson, jute mill """  Pedricktown. Perth Amboy, 40 Cortland street	B. F. Snyder
E 1794 E 1797	27. "	" 1227 West 6th street	C. J. Stace
	June 26, " July 16. "	" 1227 West 6th street" 301 West 3d street" \$28 Sherman avenue" Sherman avenue	Chas. W. Leveridge
B 4984 B 4981	Sept. 21, " 21: "	Point Pleasant, Forman avenue	Electric Light Company
B 4982 B 4983	" 21, " " 21, "	" "North Atlantic avenue	<b></b>
B 4979 E 1619	(1 01 11	" Bay avenue Peetsburg, Merster's pond	Lynch & Livingston
E 1451 E 1450	Nov. 15, 1906 15, "	Peetsburg, Merster's pond Rahway, Bridge street	Van Cleef property
E 1738	Mar. 5, 1907 Apr. 23, "	"	
E 1976 E 2032	Aug. 6, " June 4. "	R'' Robbinsville. Rosedale.	Thomas Fracey
	Sept. 23, " Jan. 21, "	Rosedale	Samuel Davis
E 1735	July 31. "	Saddle River. Salem, 375 Broadway	J. C. Van Sauer
B 5000	Oct. 22, "	Smithville	Emply Cook
E 2003 E 2031	June 1, "	Tenafly, Highwood avenue	Patrick Kelleher
E 1737 E 1452	Jan. 21, " Nov. 9, 1906	Tenafly, Highwood avenue	Mrs. Stone and Mrs. Watson
E 1457 E 1458	14,	" Trenton abattoir	
E 1480 E 1750	" 22 "	" Walter automobile works	
E 2034 E 2070	Aug. 5, "		Anthony Borsky
E 2072 E 2074	" 6, " 8, "	" 1500 Indiana avenue " Scott road and Pennington ave " 27 Bond street " 206 Calhoun street	Mrs. Anna Webb
B 4595 B 4993	Sept. 5, " Oct. 13, "	" 206 Calhoun street	
B 4779 E 1862	" 11, " Nov. 15, 1906	Washington's Crossing. West Long Branch. Woodstown, 28 East avenue.	G. F. Van Hull Wm. Beale
E 1871	Mar. 21, 1907	-,	Mr. Davis

# TAKEN FROM PRIVATE SUPPLIES—PARTS PER MILLION—(Continued).

<sup>\*</sup> Doubtful.

===				
NO.	DATE,	LOCALITY.	NAME OF INSTITUTION.	DESCRIPTION OF SOURCE.
F 2052	Tuly 10 1007	Rordentown	Colored Indust'l School	Dug well, 35 feet deep
E 2061	Aug. 6, "	Doraciiown	County Farm	Spring
	Nov. 18, 1906	Hawthorne	Public School No. 1	Well
			St. Michael's Orphan )	
E 2062	јушу 81, 1907	Hopewell	Asylum	Driven well, 400 feet deep
E 1925	Aug. 4, "	"	St. Michael's Orphan	Driven well, 400 feet deep
13 1320		l	Asylum	Dirich wen, 400 leet deep
E 1926	"4,"	"	St. Michael's Orphan }	Spring in orchard
E 1984	"9,"	Morris Plains	State Hospital	Tap in kitchen
E 1982	" 9, "			Reservoir and ice pond
E 2036	" 9, "	" "	" " …	Garden reservoir
E 1985	00t 21 "		_ "	Ice pond
B 4780	1006. 41,	Neptune Twp	Summerfield School	Dug well, 30 feet deep
B 4781 E 1784	Mar. 15. "		Whitesville School	Dug well, 30 feet deep
E 1745		NorwoodShrewsbury	Public School	Driven well, 100 feet deep Well
E 1870	Apr. 19, 1907	Trenton	State Hospital	Well
E 2046	June 12, "		" Tospital	Spring, 20 feet deep
E 2047	" 12. "		" "	Driven well, 280 feet deep
E 2049	" 12, "	"	" "	Driven well, 260 feet deep
E 2013	July 9, "		" "	Spring
E 2014	9, "	"	" "	Driven well No. 1
E 2015	9,		66 66	Driven well No. 3
E 2016	1, 10, ,,		,	Faucet in kitchen
E 2089 E 2019	" 10, " " 12. "	<b>"</b>	4 4	Spring at miller's house
E 2019	1 " 12" " " " "	66	"	Springs at Country Club
E 2020	" 17. "	"	" "	Hot water faucet
E 2053	" 27. "	"	" "	Spring
E 2055	" 30. "	44	" "	Hot water faucet
E 2056	" 30, "	44.	46 16	Spring
E 2076	" 30, "	**	" "	Tap in kitchen
E 2077	" 30, "	"	" "	Well No. 3
E 2079	30,			Well No. 2
E 2083 E 2069		"; ·············	" " …	Well No. 1
E 2009	1 E'	"	44 44	spring
E 2073	6. "	44		46
E 1986	" 9, "	"	46 46	64
E 1999	" 20. "	"	"	Cold water faucet
B 4596	Sept. 7, "	"	"	Spring, on W. State street
D 8091		Lyons Farms {	Lehigh Valley R. R.	Well, 75 feet from vault

FROM CERTAIN PUBLIC INSTITUTIONS-PARTS PER MILLION.

ı						S.F.	N	ITRO	GEN-	-				st	
	Odor, cold.	Odor, hot.	Turbidity.	Total solids.	Loss on ignition.	Mineral residue,	As ammonia.	By permanga- nate.	As nitrites.	As nitrates.	Chlorine.	Alkalinity.	Iron.	B. coli communis per ccm.	Appearance on ignition.
	<u> </u>	0	0				.004		.006					0.0	
ľ		0			*****		.000	.040	.003	1.40	7.0			Doubtful	
o	)	0	0		******	333+4+	.000	.046	.002	2.20	4.5			1.0	
þ	)	0	0			,,,,,,	.000	.034	.004	2.20	2.0			1.0	·
) 1	-musty	1-musty	s1				.000	.060	.003	0.36	4.0			0.1	
		0	0	51	21	30	.000		.004			24.0		1.0	No darkening.
		3-marshy			18	90	.008		.009		5.0	22.0		1.0 10.0	No darkening.
	-musty	2-marshy 1-musty	0	54 66	27	36 39	.000		.004			25.0	0.0	1.0	No darkening.
		3-woody	si	- 03			.004	.056	.002	0.00	22.0			0.0	
		4-sewage	40	•••			.000		.000				•••••	0.1	1
0		0			*****	******	.000		.000 $.004$				•••••	$0.0 \\ \cdot 0.1$	
là		ŏ ·				******	.000		.002					10.0	
Ċ	)	Ó	0	110	38	72	.004	.020	.001	1.60	5.2	45.0		1.0	No darkening.
Ç		o ·	0	101	37	64	.000		.000			35.0	0.2	0.0	No darkening.
		0 0	0	123 85	51 28	72 62	.000		.002		5.0	$\frac{29.0}{41.0}$	$\frac{1.3}{0.1}$	0.0 10.0	No darkening.
ć		0 .	ŏ	97	30	67	.006		.002			39.0		10.0	No darkening.
(	)	Ó	0	96.	33	63	.006		.002		5.5	27.0	0.6	10.0	No darkening.
Ç		0	0	105	37	68	.006		.002			36.0	0.8	0.0	No darkening.
0		0	0				.014		.002		5.0		•••••	1.0 0.0	
là		0	ŏ				.006		.001		5.5			0.0	
Ò		ŏ	Ŏ				.004		.001		8.0			0.0	
C		0	0				.028	.092		2.40	8.0			0.1	
9		0	0	****	*****		.004	.012	.002		7.0		•••••	0.0 0.001	
6		1-marshy 0	0	•••••			.028 $.000$		.009		8.5		•	0.001	
là		0	ŏ			******	.000		.004		5.0			0.0	
li		ă.	ŏ				.000		.001		6.5			0.0	
10		0 .	0		7772		.004	.012	.001	0.88	4.5			0.0	
		1-marshy	0				.160		.080	0.40	[11.5]		•••••	0.001	
	-woody	1-woody 1-marshy	81 0				.096		.009		7.5 6.5		•••••	0.01 0.001	l
ď	-marshy	1-marshy	lő			****	.072		.016				•••••	1.0	
lo		0	ŏ				.008		.002					0.0	1
þ		ŏ	Ŏ				.004		.002				·	10.0	
L	)	0					.116	.028	.050	2.80	43 0	<b>!</b>		1.0	l .

TABLE K. - MISCELLANEOUS ANALYSES-(SEWAGE).

		li-				-						.  -			
	,						.1	•		NITROGEN-	EN-			8i	
J	LÔCALITY.	Color.	Odor, cold.	Odor, hot.	Turdidity.	abilos latoT	nottingi no sso.I	Mineral residue	,sinomms sA	By permanga- nate.	As nitrites.	As nitrates.	Срјонпе.	B. coli commun per cem.	Appearance on Ignition.
Essex F	E2002 June 22, 1907 Essex Fells 8-sewage 5-sewage	_ <del>ss</del> _	-sewage						9.480	1.760	.002	8.	42.0		
:		-8-		2-земаде					.352	896	.020 2.200	2.200	0.6	1-50	
Pluckemin.		-8 <u>-</u>	putrid	- !-		1834	297	1555	Ť	1555			574.0 N		Much blackening.

Sample E 2002 is a mixture of spring water and water from primary contact beds. It has run over a series of steps for aeration. Sample E 2004 is the effluent from the upper bed of sand filter after passing through septic tank, contact bed and sand filter.

Sample E 2007 is the effluent from dye vats and waste fluids from washing wool.

#### EXAMINATION OF FOOD AND DRUGS.

These examinations have been conducted along lines laid down in previous reports. When the new food law goes into effect on October 1st, 1908, a considerable change will be made in the character of the analyses performed, as the provisions of the new act differ materially from those of the one now in force. Table I., which follows, shows the number of specimens of each class which have been examined during the year.

TABLE L.—SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR ENDING OCTOBER 31st, 1907.

ARTICLE.	Above standard.	Below standard.	Total.
Milk Cream Foods other than milk Drugs Kerosene Water	2,167 150 592 204 63	508 13 175 367 6	2,675 163 767 571 69 549
Totals	3,176	1,069	4,794

Table M gives certain details regarding the results of analyses of samples of milk and cream which have been found to be below the legal standard. An inspection of the table shows that the number of samples containing preservatives is small, and that apparently the only preservative in use at this time is formaldehyde. With seven exceptions, all the samples containing formaldehyde were obtained from one corporation. The number of samples in which added water could be alleged is greater than that found last year. methods at present available for the detection of added water cannot usually be relied upon to show its presence with certainty when the amount added is less than ten per cent., it may safely be assumed that a much larger proportion of the samples than that given in the table contained added water. More extended experience with the workings of that provision of the act which enables a milk dealer who sells milk below the legal standard with respect to solids to escape with a penalty of fifteen dollars has confirmed the opinion stated in the report of 1906, that the penalty is too small to deter dishonest dealers from tampering with their milk.

#### TABLE M .- SAMPLES OF MILK AND CREAM NOT CONFORMING TO LEGAL STANDARD.

Total number of samples varying from the legal standard	521
Below 12 per cent. total solids	458
Watered (refractometer reading below 39° @ 20° C.)	106
Containing formaldehyde	21
Containing analine dye	. 2
Containing viscogen (cream)	2

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Table N shows the kind and number of foods other than milk examined, and Table O the kind and number of drugs.

TABLE N .- FOODS OTHER THAN MILK.

ARTICLE.	Above standard.	Below standard.	Total.	Percentage of adulteration.
Butter	109	65	174	37.3
Catsup	22	2	24	83-
Cheese	. 17	10	27	37.0
Chocolate, milk	2		2	0.0
Chocolate, sweet	1		1	0.0
Cocoa	13		13	0.0
Coffee.	5		5	0.0
Extract of lemon	11	g	20	45.0
Extract of vanilla	49	5	54	9.2
Ginger	1		1	0.0
Honey	11		11	0.0
Jam	10	3	13	23 0
Jelly	11	2	13	15 3
Lard	50	3	53	56
Licorice candy	1	1	1	0.0
Molasses	70	4	74.	5.4
Mustard	2	<b> </b>	2	0.0
Oleomargarine	13	5	18	27.7
Olive oil	41	3	44	68
Pepper	3	l	3	0.0
Sausage	<b>2</b>		2	0.0
Strawberries	1		1	0.0
Syrup	5	. <b></b>	5	0.0
Vinegar		1	1 .	100 0
Vinegar, cider	132	61	193	31.6
Vinegar, malt		1 1	1	100 0
Vinegar, syrup		i	1	0.0
Vinegar, white	.9	1	10	10.0
Total	592	175	767	22.8

TABLE O .- DRUGS.

ARTICLE.	Above standard.	Below standard.	Total.	Percentage of adulteration.
Aether	4		4	0.0
Aqua hydrogenii dioxidi	5 3	3	8	37.5
Ferrum reductum	3	8 8	11	72.7
Jalapa	4 15	8	12	66.6
Linimentum camphoræ	15	19	34	55.8
Oleum amvgdalæ amaræ	· 6	l	6	0.0
Oleum lini	14	ll	14	0.0
Oleum morrhuæ	19		19	0.0
Potassii bitartras			23	0.0
Sodii boras	14	l	14	0.0
Spiritus camphoræ	12	24	36	66 6
Tinctura aconiti		2	2	100.0
Tinctura belladonnse	3 5	2   8 6	11	72.7
Tinctura cinchonse	. 5	6	11	54.5
Tinctura iodi	. 62	249	811	80.0
Tinctura nucis vomicæ	1	7	8	87.5
Tinctura onii	2	33	35	94.2
(Embalming fluid)	12·		12	0.0
Total	204	367	571	64.2

During the year a large number of analyses were made of tincture of iodine with the idea in view that the results would serve, in a measure at least, to form some idea of the care used by druggists in preparing drugs of this sort. Tincture of iodine is almost invariably prepared by the druggist himself, and is a preparation which is very easy to make correctly. The materials which enter into its composition are readily obtained in a state of satisfactory purity, and the finished preparation, when made according to the formula given in the Pharmacopæia of 1900, is staple for a considerable length of time. Table P, which follows, gives the results of these analyses in some detail:

TABLE P.—RESULTS OF ANALYSES OF SAMPLES OF TINCTURE OF IODINE.

Number of samples of tincture of iodine examined	311 249 62
Number containing no potassium iodide	69
Number containing less than 3 gm. of potassium iodide in 100 ccm	20
Number containing between 3 and 4 gm. of potassium iodide in 100 ccm	18
Number containing between 4 and 5 gm. of potassium iodide in 100 ccm	118
Number containing between 5 and 6 gm. of potassium iodide in 100 ccm	78
Number containing between 6 and 7 gm. of potassium iodide in 100 ccm	4.
Number containing between 7 and 8 gm. of potassium iodide in 100 ccm	2
Number containing over 8 gm. of potassium iodide in 100 ccm	2
Number containing below 4 gm. of iodine in 100 ccm	13
Number containing between 4 and 5 gm. of iodine in 100 ccm	22
Number containing between 5 and 6 gm. of iodine in 100 ccm	55
Number containing between 6 and 7 gm. of iodine in 100 ccm	125
Number containing between 7 and 8 gm. of iodine in 100 ccm	74
Number containing over 8 gm. of iodine in 100 ccm	22
Digitized by GO	

# 220 REPORT OF THE BOARD OF HEALTH.

An inspection of the table shows that straty-nine samples, or 22.2 per cent. of the samples, contained no potassium iodide, which means that the druggists making them are still using the Pharmacopæia of 1890, although the revision of 1900 has been in effect about two years. No explanation except gross carelessness can be made to account for the very wide divergence of a large number of the samples from the required amounts of iodine and potassium iodide. Experiments made in this laboratory show that a tincture made of good materials and with ordinary care such as should reasonably be expected of the average drug clerk, should not deviate more than 0.25 gm. per 100 cc. in either direction with respect to potassium iodide, and the amount of iodine should not be more than 0.1 gram per 100 ccm. greater than the amount required by the Pharmacopæia nor more than 0.4 gram per 100 ccm. less. That is, a finished tincture containing from 4.75 to 5.25 gm, of potassium iodide per 100 ccm. and from 6.50 to 7.00 gm. of iodine may be regarded as a satisfactory approximation to the theoretical tincture. Calculating the results of the analyses made during the year on this basis, it has been found that sixty-two samples, or 19.9 per cent. of the total number, come within these requirements. If the permissible deviation from the standard be doubled in each case, an allowance which is certainly too great, the number falling within the limits is 107, or 34.4 per cent. of the total number.

# Report of State Sanitary Examiners.

BY A. C. HUNT, M.D.

### To the Board of Health of the State of New Jersey:

Gentlemen—The annual report of the State board of health for 1906 contains a statement as to the examinations of applicants for licenses as health officers and inspectors, which were held prior to December 5th, 1906. On December 5th, 1906, thirty-three applicants were examined and of this number the committee recommended that ten licenses be issued to health officers, eight to inspectors of the first class and three to plumbing inspectors. A special examination of applicants for license as meat inspectors was held December 17th, 1906. Two applicants were examined and the issue of one license was recommended. At the examination held June 5th, 1907, twenty-six applicants were examined. The committee recommended that licenses be issued to one health officer, six inspectors of the first class, one inspector of the third class and two plumbing inspectors.

The following table shows the total number of persons examined to November 1st, 1907, and the total number of licenses issued:

Date of examination.	Number of applicants.	Licenses recom- mended.	Date of examination.	Number of applicants.	Licenses recom- mended.
June, 1904 Dec., " June, 1905 Dec., "	10 25 86 29	5 17 19 15	Mar., 1906 June, " Dec., " June, 1907	2 31 35 26	20 22 10
	·		Total	194	109

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# Excerpts from the Annual Reports of Local Boards of Health

# FOR THE YEAR ENDING OCTOBER 31, 1907.

Asbury Park.—The health officer, Mr. B. H. Obert, writes as follows:

The personnel of the board was changed January 1st, 1907, the term of Mr. Randolph Ross having expired, and, he refusing a reappointment, Mr. William C. Weeden was appointed as his successor.

The following preamble and resolutions were adopted by the board showing their esteem for his long and faithful service:

WHEREAS, The term of service of Mr. Randolph Ross, as a member of the board of health of Asbury Park, having expired January 1st, 1907, he having been identified with the board since January 4th, 1882, having served as secretary, registrar of vital statistics, treasurer and member, the board wishes to place on record an expression of the high esteem in which Mr. Ross has been held by this board during his long term of service; therefore, be it

Resolved, That we hereby testify to Mr. Ross' unwavering integrity, his devotion to the sanitary advancement of the city, and his wise official application of the principles of municipal hygiene in the conduct of the public affairs of the city.

Resolved, That we regret the loss to the city of Asbury Park of the services of Mr. Ross, as a member of the board of health, and we sincerely desire his future happiness and prosperity.

The total number of deaths in Asbury Park for year ending October 1st, 1907, was 141, 114 among the resident and twenty-seven among the non-resident population. The resident population, according to the police census of 1907, was 9,604, showing a death-rate among the resident population of 11.87 per 1,000.

In the annexed district (annexed to Asbury Park May 15th, 1906), which district is in a primitive sanitary state, containing about 450 acres and a population of approximately 5,000, there were eighty-one deaths. In the old district of Asbury Park but thirty-three deaths occurred among the resident population, which number is about normal for several years past.

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TABLE SHOWING THE NUMBER OF DEATHS OCCURRING IN ASBURY PARK AMONG THE RESIDENT AND NON-RESIDENT POPULATION EACH YEAR, 1881 EXCEPTED, FOR THE PAST TWENTY-EIGHT YEARS.

	Resident	•		Resident death-rate		
YEAR.	population.†	Resident.	Non-resident.	Total.	per 1,000 population.	
1880 1882,	1,640 1,784	19 30	13 18	32 48	11.58 16.81	
1883 1884 1885	$\begin{array}{c c} 1,856 \\ 1,928 \\ 2,000 \end{array}$	18 24 20	12 15 14	30 39 34	$egin{array}{c} 9.69 \ 12.44 \ 10.00 \end{array}$	
1886 1887	2,125 2,250 2,375	$\begin{array}{c} 21 \\ 20 \end{array}$	23 29	44 49	9.88	
1888 1889	2,500	16 28	18 28	34 56	8.88 6.73 11.20	
1890 1891 1892	$2,625 \\ 2,750 \\ 2,875$	32 34 · 35	$egin{array}{c} 39 \\ 28 \\ 24 \\ \end{array}$	71 62 59	$\substack{12.19 \\ 13.36 \\ 12.17}$	
1893 1894	3,000 3,380	· 30 · 40	19 21	49 61	$10.00 \\ 11.86$	
1895 1896 1897	3,761 3,838 3,916	39 34 43	$\begin{array}{c c} 17 \\ 25 \\ 19 \end{array}$	56 59 62	$10.36 \\ 8.85 \\ 10.98$	
1898 1899	3,993 4,071	$\begin{array}{c} 28 \\ 37 \end{array}$	13 -	. 41 . 59	$\begin{array}{c} 7.01 \\ 9.08 \end{array}$	
1900 1901 1902	4,148 $4,223$ $4,298$	36 37 32	$\begin{array}{c c} 22 \\ 21 \\ 19 \end{array}$	58 58 51	8.67 8.76 7.44	
1903 1904	4,374 4,450	$\begin{array}{c} 36 \\ 47 \end{array}$	13 12	49 59	$\substack{8.22\\10.55}$	
1905 1906 1907	4,526 *4,602 9,610	26 *46 114	*25 *25 27	51 *71 141	5.75 *10.00 11.87	

# TABLE SHOWING AGES AT DEATH FOR YEAR ENDING OCTOBER 1ST, 1907.

AGES.	Males.	Females.	Total.
Under one year  1 to 2 years 2 to 5 years 5 to 10 years 10 to 20 years 20 to 30 years 30 to 40 years 40 to 50 years 50 to 60 years 60 to 70 years 70 to 80 years 80 to 90 years 90 to 100 years 100 to 110 years	2 3 5 10 10 7	16 1 3 1 2 98 88 13 66 61	36 3 3 3 4 12 13 18 23 13 7
Totals	65	75	140

<sup>\*</sup> Does not include district newly annexed. † Resident population estimated except for years 1880, 1895, 1900, 1905 and 1907.

TABLE SHOWING MARRIAGES, BIRTHS AND STILL BIRTHS FOR THE PAST EIGHTEEN YEARS.

	YEARS.	Resident population.*	Marriages.	Births.	Still births.
1890		2,625	65	32	
1891		2,750	. 45	49	1
1892		5,100	48	40	1 5
1992		2,875	20	<b>46</b>	2
1893		8,000	50	55	1
1894		3,380	47	45	1 1
1895		3.761	61	51	l ä
1896		3,838	44	37 ·	1
1897		3,916	44 82	5i	1 6
1000		8,810	94		2
1898		8,993	45	46	1 1
1899		4,071	55	39	1
1900		4.148	45	34	. 2
1901		4,225	55	33	1 2
1902		4,302	58	- 45	_
1903		4.379	60	20	1
1000				3 <u>4</u>	1 2
1904		4,456	54	27	3 .
1905		4,526	61	29	2
1906		9,464	76	82	R
907		9.604	98	159	8 15

<sup>\*</sup>Estimated except for census years.

Nineteen cases of infectious diseases have been reported to the board of health during the year as follows: Diphtheria, 4; scarlet fever, 7; Typhoid fever, 5; measles, 3.

#### DIPHTHERIA.

Cases Nos. 1 and 2 occurred January 2d and 8th respectively, and were confirmed by culture specimens sent to the State laboratory. The sources of infection were not learned. Case No. 3, occurred February 1st, an adult. Two specimens were sent from this case to the laboratory which failed to confirm the clinical diagnosis. Case No. 4, a young lady fifteen years of age, occurred August 4th. The patient came to Asbury Park from Washington, D. C., and had been here but four days when attacked with the disease.

#### SCARLET FEVER.

Case No. 1, a child three years of age, occurred November 21st, 1906. The source of infection was evidently in Englishtown, N. J., where the child has been visiting, and it was reported cases of said disease existed in that vicinity. The date of attack of said disease was four days after returning to Asbury Park. Cases Nos. 2 and 3, children six and seven years of age respectively, occurred March 24th, in different families. The sources of infection were not learned. Case No. 4, mother of case No. 3, occurred April 1st, and was undoubtedly contracted while acting as nurse for her child. Case No. 5, a child eight years of age, an Assyrian, occurred August 15th. The source of infection was not learned. Cases Nos. 6 and 7, children five and nine years of age respectively, occurred September 16th. The patients had just returned to Asbury Park from Indiana, and had been here but five days preceding the attack.

#### TYPHOID FEVER.

The first case of typhoid fever, an adult twenty-four years of age, occurred October 9th, 1906. The patient had been employed as brakeman on a freight train on the Central Railroad of New Jersey, and only visited Asbury Park occasionally. Case No. 2, a colored girl eighteen years of age, occurred November 21st. The source of infection was not learned. Cases 3 and 4, father and daughter, ages thirty-five and eleven years respectively, occurred June 23d, and were confirmed by specimens of blood sent to the State laboratory. The disease in these cases was undoubtedly contracted in Paterson, N. J., where the patients had visited a family in which the disease existed. Case No. 5, a child twelve years of age, occurred August 13th. The source of infection was not learned.

#### MEASLES.

Case No. 1, occurred June 7th, a child two years of age, in a family of Italians who had recently arrived in this country. Case No. 2, a child seven years of age, occurred June 20th. The source of infection was not learned.

TABLE SHOWING THE NUMBER OF REPORTED CASES OF INFECTIOUS DISEASES IN ASBURY PARK, AND DEATHS OCCURRING THEREFROM, DURING THE PAST TWENTY-THREE YEARS.

		Number of cases reported.			Deaths.								
YEARS.	Resident popula- tion (estimated except for census years).	Measles.	Scarlet feyer.	Diphtheria.	Typhoid fever.	Consumption.	Small-pox.	Measles,	Scarlet fever.	Diphtheria.	Typhoid fever.	Consumption.	Small-pox.
1885 1886 1886 1887 1888 1888 1889 1890 1891 1892 1893 1898 1895 1896 1897 1898 1898 1898 1899 1900 1901 1902 1903 1904 1906 1906	2,000 2,125 2,250 2,375 2,500 2,625 2,750 2,875 3,000 3,360 3,761 3,838 3,916 3,993 4,071 4,148 4,225 4,302 4,379 4,4526 9,464 9,604	144 822 10 366 839 5 5 4 200 6 6 177 30 120 9 31 3	2 7 20 3 16 6 4 7 7 7 5 3 14 8 6	7 6 2 5 2 15 1 2 4 2 2 1 1	1 1 1 2 2 2 3 3 5 1 2 2 6 6 5 5	1	8	1		1 44 77 11 1 2 2 3 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1	25 33 44 55 22 77 21 13 55 77 44 28	
Totals		449	164	104	47	5	11	1	9	28	7	99	1

The municipal hospital for infectious diseases has been used three times during the year, three cases having been cared for therein. Telephones have been placed in the hospital building and caretakers' cottage. At a meeting of the board of health, held May 17th, 1907, the following preambles and resolution were unanimously adopted and ordered transmitted to the common council of Asbury Park: "WHEREAS, The original plan for the isolation hospital for Asbury Park included separate pavilions for small-pox, diphtheria and scarlet fever, but the funds then available permitted the erection of buildings for small-pox and diphtheria only; WHEREAS, it has been with great reluctance that this board has allowed the admission of scarlet fever cases to the diphtheria pavilion, for experience in other cities has shown that infection of these two diseases is extremely liable to be transmitted from one patient to another, either by direct contact, through the agency of nurses or by fomites, if both diseases are treated under the same roof; WHEREAS, the sum of fifteen hundred dollars is now in the hands of the treasurer of the Present Day Club, and this amount, together with the further sum of one thousand dollars, which was appropriated by the city in 1906, can now be applied toward the erection of a pavilion to be used for the reception of scarlet fever patients; WHEREAS, about a year ago Mr. James Stroud very generously prepared plans without charge for a new pavilion, well adapted to the purpose in view, and this board is informed that the building can be erected for approximately the sum of six thousand dollars; Resolved, That we hereby respectfully recommend and advise that the sum of money necessary, in addition to that sum already in hand, be provided by the common council of Asbury Park for the erection of a scarlet fever pavilion in accordance with the plans and specifications furnished by Mr. James Stroud." The common council appropriated \$3,000.00 for a proposed hospital pavilion, which, with the \$1,000.00 appropriated by said body in 1906, and about \$2,000.00 raised by the ladies of the Present Day Club, of Asbury Park, made a sum of \$6,000.00 available for the proposed building. Plans prepared by James Stroud, architect, were approved by the board of health, at meeting held September 10th, 1907, and the common council were requested to advertise for bids and proceed with the erection thereof at an early date. The common council have advertised for bids, to be received at meeting to be held October 7th, 1907. building is completed we will have separate buildings for receiving and caring for small-pox, diphtheria and scarlet fever patients, when it is impractical to isolate such cases in their homes.

The board of education of Asbury Park requested the board of health to place whooping-cough on the list of reportable infectious diseases. Owing to the fact that a physician is called to only a small number of cases of whooping-cough, and because of the difficulties which arise in an effort to control the spread of this disease, it was deemed unwise at this time to add whooping-cough to the list of reportable infectious diseases.

One hundred and twenty-three specimens of diseased tissues have been sent during the year through this department to the State bacteriological laboratory for diagnosis, as follows:

SPECIMENS.	Positive.	Negative.	Unsatis- factory.	Total.
Suspected diphtheria Suspected tuberculosis Suspected malarial organ-	7 21	20 59		27 80
ism	6	2 7	i	2 14
Totals	34	88	1	123

#### MILK.

The usual supervision of the milk supply has been exercised during the year. A number of dairies supplying milk to Asbury Park, have been examined by inspectors of the State board of health and records furnished to this board. In cases where a polluted water-supply or other condition of a dangerous nature existed on the dairies, the milk has been excluded from Asbury Park. Samples of milk have been collected by inspectors of the State board of health and analyzed by the State laboratory from this district, and prosecutions have followed where samples of milk have been found below the standard or have contained preservatives.

#### WATER-SUPPLY.

The city of Asbury Park increased its supply of water from artesian wells by driving a new well eight inches in diameter and 1,045 feet in depth. This well supplies 500,000 gallons of water in twenty-four hours, making a total available supply of water from artesian wells of 1,850,000 gallons in twenty-four hours. In the old portion of Asbury Park it was not necessary to take any water from outside sources during the year, and about 1,000,000 gallons of water were sold in July to the East Jersey Coast Water Co. to supply the annexed district. The East Jersey Coast Water Co. that supplies water to a large portion of the annexed district has made several extensions of its mains. The water supplies by this company is from Kisner's pond. Analyses of samples of the water-supplies of Asbury Park have been made by the State laboratory of hygiene, which results are published in the annual report of the State board of health, and the Kisner's pond supply is frequently inspected and a careful watch is maintained of same.

#### WELLS.

Inspections have been made of the wells on private premises, the waters of which are used for potable purposes, and wells located within forty feet of a leaching privy vault or other visible source of pollution, or which, upon examination at the State laboratory of hygiene, were found to be polluted, have been ordered filled with clean earth and their use abandoned, resulting in the closing of forty-one wells.

#### ICE.

At a meeting of the board of health, held July 9th, 1907, complaints were made that ice was being sold in Asbury Park by a local ice dealer, harvested from Alberta lake, located about one mile west from the main road from Asbury

Park to Belmar, and about two hundred yards south of Corlies avenue, in Neptune township, the water of which lake is polluted. The board decided to meet July 11th, 1907, and give the local ice company an opportunity to be present and present such facts as they might have touching the matter above referred to. The following notice was adopted and served upon said company: "To ———

"Take notice:

"WHEREAS, Complaint has been made to the board of health of the city of Asbury Park, that you are engaged in the sale and delivery of ice within the limits of said city taken from a pond situate in the township of Neptune, about one mile west from the main road from Asbury Park to Belmar, and about two hundred yards south of Corlies avenue in said township, said pond being known as Alberta lake; and that said ice is unfit for use by reason of the waters of said pond having been, prior to and at the time of the cutting of said ice, polluted by sewage matter and decomposed animal and vegetable substances. You are therefore notified that the said board of health will, on the 11th day of July, 1907, at its office, 709 Asbury avenue, said city, at the hour of eight o'clock P. M., investigate and determine said complaint and also determine whether the said ice is unfit for use and detrimental to the public health. This notice is given you under section 2 of an act of the legislature of New Jersey, approved March 18th, 1885, entitled 'An act respecting the sale and cutting of ice in cities of this State,' giving all boards of health in such cities power to regulate and control the same. You are therefore requested to be present at the said time and place and give such evidence as you may have touching said matter."

At a meeting held July 11th, 1907, the following action was taken: The health officer reported on the pollution of Alberta lake and the streams supplying water thereto as follows:

That a chicken-yard is located on the banks of Alberta lake, near the ice houses, and chickens and ducks are permitted to go to the water of the pond; that two privy vaults are located on the banks within about fifteen feet of Alberta lake; that skating is permitted on said lake; that a drain from a cesspool, to which water closets are connected, discharges direct into the stream; that an accumulation, approximately 100 feet by twenty-five feet, varying in depth from one to eight feet, of rubbish has been deposited upon the ground on a bank sloping toward and within ten feet of the stream, and all drainage therefrom flows directly into the stream; a cow and horse stable, with a large accumulation of manure upon the ground, is located upon the bank sloping to the stream. The stream above referred to flows into Alberta lake. The said pollutions have existed for over a year. Said company not appearing at said meeting and informing the board, it was unable to be represented at that time, it was voted that they be given a notice to meet the board on July 16th, 1907. At a meeting held July 16th, the ice company agreeing to deliver ice from said lake in open wagons, the ice to be covered only with a canvas sheet, it was voted that a permit be granted to said company to sell the ice now on hand which was harvested from Alberta lake, for cooling purposes only, to butchers, grocers, fish and oyster dealers. . At meeting of the board of health, held August 16th, the health officer reported that said ice company has not complied with the agreement or terms of the permit granted at meeting of the board held July 16th, and has delivered ice to hotels, boarding-houses and dwellings in Asbury Park, which ice has been placed in coolers used for drinking purposes, whereupon the board adopted the following preamble and resolutions: "Whereas, Complaints have been made to this board that said

ice company has been and is engaged in the sale and delivery of ice for domestic purposes in this city, taken from a pond in the township of Neptune, known as Alberta lake, contrary to the terms of the permit granted to said ice company, and, WHEREAS, The said board having heretofore notified said ice company that said ice taken from said lake was unfit for use by reason of the water of said lake having been, prior to and at the time of the cutting of said ice, polluted by sewage and decomposed animal and vegetable substances, and, WHEREAS, Due notice having been given to said ice company that this board would on the date hereof, at its office, in this city, at the hour of five o'clock P. M., investigate and determine said complaints, and also determine whether the permits granted the said ice company for the sale of ice in this city would be revoked, and, WHEREAS, Said parties, or either of them, not appearing, and the said board having taken up said matters, therefore be it Resolved. That in the judgment of this board said complaints are well founded and established to the satisfaction of this board, and that ice taken from said Alberta lake by said ice company is unfit for public use in this city for the reason that the waters of said lake having been, prior to and at the time of the cutting of said ice, polluted as aforesaid, and that the sale of said ice would be detrimental to public health, and, be it further Resolved, That the permits heretofore issued to the said ice company for the sale of ice in this city be and the same are hereby revoked, and be it further Resolved. That the sale of ice in this city heretofore or hereafter to be taken or cut from said lake be and is hereby prohibited, and be it further Resolved, That the secretary of this board be instructed to notify the said ice company not to bring into or sell in this city any ice taken or cut from said Alberta lake." The following notice was served upon said ice company: "To -Take notice.—You are prohibited from selling ice in Asbury Park, or bringing into Asbury Park for sale, any ice taken from Alberta lake, township of Neptune, Monmouth county, New Jersey. You are also prohibited from selling any ice in Asbury Park, and you are also prohibited from bringing, for sale, any ice into said Asbury Park. This notice is given to you under the provisions of an act of legislature of New Jersey, dated March 18th, 1885." The said ice company did not sell or deliver in Asbury Park ice from said lake after the service upon them of the above notice.

#### MOSQUITOES.

The board of health has continued its efforts to prevent the breeding of mosquitoes in Asbury Park during the year. Gutters in the streets in the annexed district have been drained, and persons occupying property where mosquito larvæ were found breeding in water retained in depressions in the ground or in miscellaneous receptacles, such as rain-water barrels, pails, tubs, tin cans, &c., were notified and required to prevent water being retained on such premises in a manner that mosquito larvæ may breed therein, resulting in fewer mosquitoes in Asbury Park during the past year than for many years.

#### PRIVY VAULTS.

The old district of Asbury Park contains but two privy vaults, one of which is kept carefully screened and no flies have ever been found therein; the other, the owner has promised to abandon at an early date. In the annexed district,

in which district but two and three-fourths miles of sewers are laid, 860 privy vaults exist, twenty-three of which have sewer connections. The constructions of these vaults vary, some of wood, some are depressions in the ground and some are of brick and cement, the majority of which are leaching. During the year thirty-four privy vaults in this district have been abandoned and the owners of all privy vaults where sewers are available have been notified to abandon the use thereof. A contract has been awarded for laying the sewers in the entire district not sewered, the contract calling for completion of the work by December 15th, 1907. When these sewers are completed rapid progress will undoubtedly be made in abating the privy vault nuisance, and the board is determined to accomplish this end in the near future.

#### GARBAGE AND BUBBISH.

The manner of collecting, removing and disposing of the garbage from Asbury Park during the year has continued unsatisfactory and far below the standard of former years. The contractor in the annexed district, the work being performed under separate contracts and by different contractors, one for the old district and one for the annexed district, has performed the work in an excellent manner and but twenty-seven complaints have been received at the office against him, six of which were found to be unfounded. In the old district 470 complaints were received, seventy-three of which were found to be unfounded. The need of a plant for the sanitary disposal of these waste products has been forcibly demonstrated during the year. The nuisance created in the present manner of disposal has been greater than for many years, and the authorities in the township districts where the disposal is made, have ordered that suits be brought against the contractor and threaten to forbid any of these waste products being taken into their sanitary district unless the method of disposal is so improved that it will not create a nuisance.

TABLE SHOWING THE AMOUNT AND COST PER CUBIC YARD FOR THE REMOVAL AND DISPOSAL OF GARBAGE, DEAD ANIMALS AND RUBBISH FROM ASBURY PARK, FOR THE PAST NINE YEARS.

# Garbage and Dead Animals.

•	YEAR.	Contract price.	Number of cubic yards removed.	Average cost per cubic yard.
1899		\$2,400 00	3,652.83	\$0.6570
1900		2,400 00	3,540.94	0.6777
1901		2,400 00	3,601.74	0.6663
1902		2,850 00	3,634.61	0.7841
1903		2,850 00	3,481.97	0.8185
1904		2,850 00	3,849.58	0.7403
1905		2,166 66	5,567.97	0.3891
1906		4,903 85	*3,339.05	1.4686
1907		5,100-00	4,591.63	1.1107

Rubbish.

YEAR.	Contract price.	No. of cubic yards removed.	Average cost per cubic yard.
1899	\$2,000 00	7,038.5	\$0.2841
	2,000 00	7,494.0	0.2669
	2,000 00	8,410.0	0.2378
	2,000 00	8,804.0	0.2271
1903	2,000 00	10,509.4	0.1903
1904	2,000 00	10,437.4	0.1916
1905	2,166 66	13,253.8	0.1635
1906	4,408 28	•13,146.0	0.3353

Approximated from August 14th to September 14th, 190%

In the annexed district 759.93 cubic yards of garbage ere removed at a cost of \$700 or \$0.9211 per cubic yard. In the old district of Asbury Park, 3,831.70 cubic yards of garbage were removed at a cost of \$4,4 for \$1.1483 per cubic yard. In this district special permits were given to armers to remove the garbage from six of the larger hotels, requiring that garbage be removed in metal cans, the cans in which it is stored on the property, and the cans to be washed before being returned to the city. It will be seen that the amount of garbage accumulating in Asbury Park during the year is considerably greater than for the preceding year. The rubbish removed in the annexed district amounted to 3,050 cubic yards, at a cost of \$900 or \$0.295 per cubic yard. In the old district of Asbury Park 13,157 cubic yards were removed at a cost of \$4,000 or \$0.304 per cubic yard.

The garbage contractors' daily reports for the past eight years show the following number of violations, by householders, of the health ordinances, in the manner of storing garbage and rubbish:

NATURE OF VIOLATION.		1901.	1902.	1903.	1904.	1905.	1906.	1907.
Premises with leaky receptacles	21	44	. 8	38	36	6	26	. 18
Premises on which garbage was stored in \ wooden receptacles	. 29	42	<b>49</b> .	<b>3</b> 5	22	9	5	4
Garbage receptacles containing an exces-	8	8	. 8	4	14	<b></b>		1
Premises on which garbage receptacles were inadequate.	22	49	57	20	1	<b></b>	12	3
Premises on which garbage was stored in inaccessible places		1	1			<b> </b>	2	1
Premises on which garbage receptacles were too large to be conveniently handled	8	1	2	15	5		2	3
Premises on which ashes were mixed with garbage	1	<b></b>	ĺ	1	8	ļ	1	1
Premises on which rubbish was mixed with garbage	5	1	. <b></b> ,	7	4	ļ	3	8
Premises on which rubbish contained pro-	8	8	1	7	16	2	1	5
Totals	97	144	121	127	101	17	52	44

TABLE SHOWING THE NUMBER OF WRITTEN PERMITS ISSUED DURING THE YEAR,

BY MONTHS.

						•					
MONTHS,	Certificate of approval of plumbing plans.	Subsurface drainage.	Constructing stable manure receptacles.	To scavengers.	For collecting butchers' offel and fat.	Burial and transit.	Transit, local.	For collecting garbage from private premises.	To return to public school after infectious diseases.	Certificate of health.	Totals.
1906. October November December 1907. January February March April May June July August September	23 20	3 2 1 1 1 1	14 10 12 16 1 12 21 17 7 4 1	59 8 9 8 2 ·20 58 50 81 67 44 39	4	10 9 20 16 10 14 8 7 3 17 12 8	1 5 1 1 1 4 4 8 8 7 9 5	3 2 2 1	1 2	1	107 52 51 62 20 75 117 101 120 109 91 76
Totals	214	10	116	445	4	134	44	8	5	1 1	981

#### OFFICE AND INSPECTION WORK.

Number of violations of health ordinances reported by inspectors during the year, 2,093; number of reinspections of premises after notice to abate nuisance had been sent, 1,229; number of citizens' complaints investigated, 1,083; number of written orders sent to abate nuisances, 935; number of cases in which notice to abate nuisance were known to have been complied with without further action, 331; number of cases referred to the board, with request for instruction, 60; number of written communications sent from the office, 1,431; number of inspections made of plumbing work under construction, 732; number of air-pressure tests applied to plumbing work under construction, 200; number of smoke tests applied to plumbing work, 131; number of notices for minor alterations and repairs in plumbing work, filed by plumbers, and inspections made, 84; number of plumbing plans approved, 214; number of special inspections of plumbing fixtures in dwellings and records made of same, 338; number of sanitary records and diagrams of properties made, 484; number of specimens sent to State bacteriological laboratory and replies received through this office, 123; number of disinfections performed in dwellings, 15.

During the year thirty books for keeping records of sanitary inspections of properties were added for the annexed district, one book for each street, which books are similar to those which have been in use by the board, and which consist of leather covers, loose-leaf arrangement, colored sheets indexed with the first number of each block, and a separate double sheet for each property. The map cabinet in the office was enlarged to double its capacity for maps of the newly annexed district, and maps showing each lot obtained therefor; routing tacks are used to designate different conditions.

Ten subjects are covered in the cabinet, a separate drawer and map being devoted to each, which subjects are as follows: Communicable diseases, wells, vaults, mosquitoes, catch-basins, direct connections to sewers, sewers, stables, stable manure receptacles, and markets. A thirty-drawer document file and a cabinet case, seven feet by two and one-half feet, in which to keep blanks and stationery, were also added during the year.

TABLE SHOWING NUMBER OF PROSECUTIONS FOR VIOLATING HEALTH ORDINANCES, FOR THE YEAR ENDING OCTOBER 1ST. 1907.

	<del></del>					
NATURE OF VIOLATION.	Number of suits ordered.	Nuisance abated before case was tried.	Judgment rendered.	Amount of judgment rendered.	Amount of judgment collected.	Cases appealed.
Failure to make application for final test and inspection of plumbing work after completion					\$23 00	
Construction of plumbing work in violation of ordinance	1		1	\$50 00		
Constructing plumbing work without first filing plans with the board of health	2		2	100 00		1
Maintaining privy vault in a manner permitting flies to have access to filthy contents		l		l	5 00	
Storing stable manure upon ground	6		7	175 00	144 48	2
Failure to file with board complete list as to source of supply of milk sold by dealer		¦	1	50 00		1
Maintaining well on premises the water of which is polluted		ļ	1	50 00	5 00	
Storing decomposing rubbish upon ground		2	[		ļ	
Maintaining leaching cesspool	1		1	25 00	' <u></u>	<u>                                     </u>
Totals	11	1 2	13	\$450 00	<b>\$177 48</b>	5

Of the two cases for constructing plumbing work without first filing plans with the board of health, in which judgments were secured in each case, one of the cases, which was against a railroad company, has been appealed. Of the cases brought for violating the ordinances by storing stable manure upon the ground, two were appealed, but these cases were dismissed by the court of common pleas. The case brought for failure to file with board complete list as to source of supply of milk sold by dealer was tried in the justice court and judgment secured, which case was appealed and was dismissed at last term of court. The case was reinstated on the grounds that the defendant's attorney did not appear at the trial on appeal through some misunderstanding on his part of the place of trial. The case brought for maintaining a leaching cesspool was tried in the justice court and judgment rendered in favor of the board of health for \$25 and costs. The case was appealed by the defendant, and the defendant has demanded a trial by jury. The right of a trial by jury in board of health cases is disputed by our counsel, and the matter will be determined on argument prior to the trial of the case on its merits. In seven of the cases tried, and in which judgment was secured by the board of health, the defendants appeared before the board and requested that upon condition that they abated nuisances for which trial was brought and paid all costs incurred by the board in bringing suit, including fees of attorney, that the board would not collect the judgment, which requests the board granted.

The attorney of the board writes as follows: It is important and necessary that legislation be secured placing the control of the sale and delivery of ice under the jurisdiction of boards of health. The existing legislation is in-There should be an act authorizing health boards to enact ordinances requiring persons selling or delivering ice in cities of the class to which Asbury Park belongs, to obtain a permit from such boards and enabling the boards to impose severe penalties for violation of the ordinance. There is already legislation in this State giving cities of the first class such power, but Asbury Park is a city under another classification, and hence needs additional legislation. The present powers of health boards, with the exception of the above, seem to be adequate. In municipalities where there is an efficient enforcement of the health laws, similar to that prevailing in Asbury Park, there is no difficulty in securing the most sanitary and beneficial results under health ordinances. From my observation and experience in these cases I am quite certain that the community recognizes more fully than ever the great importance of health regulations and their strict enforcement. There was formerly in Asbury Park a class of persons who persisted in defying the board and its regulations. It is my opinion that this class has been greatly reduced in number and is rapidly diminishing from the incessant warfare upon them by the board. I think there are not more than three persons remaining from those who formerly combined and co-operated to oppose and defy ordinances of the board. It is the confident expectation of the counsel and board of health that this remnant of violators of the ordinances will soon be put to rout, either by heavy fines or commitment to the county jail.

Montclair.—The health officer reviews the work of the board during the year as follows:

Probably the most important work of the board during the past year was the adoption and passage on April 9th, 1907, of a new sanitary code. The former code was entirely revised and brought up to date and many new regulations were added, the most important of which relates to the production and sale of milk, to the exposure for sale of foods and to barber shops and tenement-houses. Some of the regulations follow: All privies and cesspools are declared to constitute nuisances; spitting upon the sidewalk or in any other public place is prohibited; food which is to be consumed without further cooking is not to be exposed for sale except in closed containers; living rooms are not to connect with stores in which food is sold; drinking utensils at soda fountains must be rinsed in running water before each separate use; no milk can be sold unless the cows from which it is obtained have passed the tuberculin test within one year; all bottles and other utensils used in the collection and transportation of milk must be sterilized by steam; no milk shall be delivered at a temperature higher than 50° F.; tuberculosis in all forms is to be reported.

The results of the tuberculin test show that there was great need for the requirement. Of the New Jersey cattle which supply Montclair, about one in every four reacted and of those slaughtered the udder was diseased in some of the cows that would have passed a physical examination as perfectly sound. It is not necessary to dwell upon the necessity of having such cows removed from dairy herds but it should be borne in mind that the large majority of these sources of infection can be detected only by the tuberculin test.

About 300 samples of milk and twenty-five samples of cream have been analyzed during the year. Formaldehyde was found in one sample and the dealer

was fined \$50. Four milk dealers withdrew from the business for the reason that they could not comply with the requirements of our sanitary code. The remaining dealers have co-operated with the board in its endeavor to obtain a pure and wholesome milk supply.

During the year there were reported thirty-four cases of tuberculosis, thirty-eight cases of scarlet fever, thirty-two cases of diphtheria and twenty-two cases of typhoid fever. There was no case of small-pox during the year. The majority of the cases of typhoid fever were contracted outside of Montclair and developed within two weeks of the return of the patient to Montclair. One case of glanders and two cases of rables were reported. One of the rabid dogs bit eight persons before he was killed and this board furnished the pasteur treatment for one victim who was unable to pay for the treatment himself.

There have been 267 deaths, which corresponds to a death-rate of 15.46. If we deduct the fifty-three non-resident deaths at the hospitals we have a corrected death-rate of 12.40. Of the total number of deaths 32.1 per cent. were under five years of age and of the resident deaths 28.0 per cent. were under five years of age. The death-rates are calculated from an estimated mid-year population of 17,250. There were twenty-four deaths from pneumonia, twenty-one from tuberculosis, six from whooping-cough, two from erysipelas, one from scarlet fever, one from measles, one from typhoid fever and none from diphtheria.

# Legal Decisions and Opinions.

### SMOKE NUISANCES.

The following ordinance was adopted by the board of health of Jersey City, June 26th, 1903:

"The owners, lessees, tenants, occupants and managers of every shop, manufactory and premises where any burning is done or wherein or upon any engine or locomotive is used shall not cause, suffer or allow any cinders, dust, gas or smoke to escape or be discharged from such building or premises to the detriment or annoyance of any person not being therein or thereon engaged.

"Nor shall any owner, lessee, occupant, manager, or any engineer, fireman or any other person cause, suffer, or allow any smoke to escape or be discharged from any such building or premises or any engine or locomotive used therein or thereon, as the result of the use of what is known as soft coal, or any other substance.

"The continued or repeated infraction or violation of this ordinance or any section thereof continued or repeated throughout a period of time more than twenty-four hours in extent shall be considered as a separate and distinct violation for each and every such period of twenty-four hours.

"It shall be lawful for the mayor, or any member of the board of health, or the health inspector, or deputy health inspector, or any police officer of the city to enter into or upon any land, building or any other premises for the purpose of ascertaining whether or not the provisions of this ordinance are being complied with, and it shall not be lawful for any person or persons to obstruct or resist any such person or officer in the discharge of any such right or duty under the penalty herein provided.

"Any person or persons offending against any of the provisions of this ordinance or any section thereof shall forfeit and pay a penalty of fifty dollars for each and every violation thereof.

"Whenever any person or persons shall make complaint on oath or affirmation, according to law, that any person or persons has or may have violated any of the provisions of this ordinance before any police justice it shall be lawful for such police justice to issue process either in nature of a summons or warrant against the person or persons so charged, which process shall, when in the nature of a warrant, be returnable forthwith, and when in the nature of a summons shall be returnable in not less than one or more than ten entire days."

An action against the Pennsylvania Railroad Company was instituted under the provisions of the foregoing ordinance, and the decision of the Supreme Court in this case is as follows:

New Jersey Supreme Court, June term, 1904.

The Mayor, &c., of Jersey City v. Abercrombie. Certiorari.

An ordinance of Jersey City which provides that the owner of any premises on which an engine or locomotive is used shall not, under a penalty therein prescribed, permit any cinders, dust, gas or smoke to escape or be discharged therefrom to the detriment or annoyance of any person not being therein or

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thereon engaged, is unreasonable and void, at least in so far as it affects the Pennsylvania Railroad Company, which has the legal right to use either hard or soft coal, using due care and doing no unnecessary damage.

New Jersey Supreme Court, June term, 1904.

The Mayor and Aldermen v. Frank P. Abercrombie. Certiorari.

Argued at February term, 1904, before Justices Van Syckel, Fort and Garretson. George L. Record and Robert Carey for plaintiff; Vredenburgh, Wall & Van Winkle for defendant.

The opinion of the court was delivered by Van Syckel, J.: The certiorari in this case brings up a judgment of the First Criminal Court of Jersey City against Abercrombie for violating the following ordinance while superintendent of the Pennsylvania Railroad Company:

"An ordinance to abate all nuisances arising or resulting from the burning of soft coal or other substances and prohibiting the escape or discharge of smoke, dust, gas and cinders. Section 219. The owners, lessees, tenants, occupants and managers of every shop, manufactory and premises where any burning is done, or wherein or upon any engine or locomotive is used, shall not cause, suffer or allow any cinders, dust, gas, or smoke to escape or be discharged from such building or premises to the detriment or annoyance of any person not being therein or thereon engaged. Nor shall any owner, lessee, occupant, manager or any engineer, fireman, or any other person, cause, suffer or allow any smoke to escape or be discharged from any such building or premises, or any engine or locomotive used therein or thereon, as the result of the use of what is known as soft coal or any other substance."

The Pennsylvania railroad has the legal right to run its engines with the use of either hard or soft coal, so long as reasonable care is used and no unnecessary damage is done. A strict enforcement of the ordinance would deprive the company of the right to run trains through Jersey City. The ordinance is unreasonable, and therefore void.

Jenkins v. Pennsylvania Railroad, 38 Vr. 331.

The judgment should be reversed.

Following is the opinion of the Court of Errors and Appeals in the action brought by the State board of health to prevent the pollution of a tributary of the Maurice river by sewage from the borough of Vineland:

New Jersey Court of Errors and Appeals.

The State, ex rel. the Board of Health of the State of New Jersey, appellant, v. The Borough of Vineland, respondent.

On appeal from decree advised by Vice Chancellor Leaming.

For the appellant, Edward D. Duffield and Robert H. McCarter, attorney-general; for the respondent, Herbert C. Bartlett and Royal P. Teller.

The opinion of the court was delivered by Gummere, C. J.

This is an appeal from a decree of the Court of Chancery dismissing a bill of complaint filed in the name of the State on the relation of the State board of health, for the purpose of securing an injunction to restrain the borough of Vineland from permitting the effluent from its sewage filtration beds to flow into the waters of a tributary of Maurice river, from which the city of Millville takes its water-supply. The bill is filed by the State board of health under the act of March 17th, 1899, entitled "An act to secure the purity of the public supplies of potable waters in this State." It was dismissed on the ground that, as the learned vice chancellor considered, this statute was repealed, by implication, by a subsequent act passed in the same year, entitled "An act to prevent the pollution of the waters of this State by the establishment of a State sewerage commission, and authorizing the creation

of sewerage districts and district sewerage boards, and prescribing, defining and regulating the powers and duties of such commission and such boards," as revised and amended by the legislature of 1900. P. L. 1900, p. 113.

We have had occasion at the present term to consider the question whether the act creating the State sewerage commission, by necessary implication, repealed the act to secure the purity of the public supplies of potable waters in this State, and reached the conclusion that it repealed only so much of the prior legislation as was repugnant to the provisions of the later act. State, ex rel. Board of Health of New Jersey, v. Ihnken.

It appears from the proofs in the case that the borough of Vineland reconstructed the plant for the treatment of its sewage, the effluent of which flows into the tributary of Maurice river, in the year 1903, under conditions which were approved by the State sewerage commission, and upon plans which it submitted to that body, before constructing its plant, and which received its approval. By the seventh section of the act creating the State sewerage commission, as amended in 1900, it is declared that "It shall be unlawful for any person, corporation or municipality to build, or cause to be ouilt, or operate, any plant for the treatment of sewage or other polluting substance, from which the effluent is to flow into any of the waters of this State, except under such conditions as shall be approved by the State sewerage commission, to whom any new plans shall be submitted before building." The enactment of this provision is a legislative recognition of the fact that the health of the citizens of a municipality absolutely requires the adoption of some method for the disposition of its sewage, and that some part of the effluent thereof will almost inevitably be carried to running streams. Recognizing these facts, and the importance of having such disposal plants constructed under proper supervision, it created a body for that purpose, and declared that it should be unlawful for a municipality to construct any such disposal plant which did not meet with its approval, and, by necessary inference, made lawful all such plants as were constructed upon plans and under conditions approved by the commission. By necessary implication, also, it removed from the supervision of the State board of health sewerage disposal plants so constructed, and relieved the owners and users of such plants from the liabilities created by the provisions of "An act to secure the purity of the public supplies of potable waters in this State."

For this reason the decree appealed from should be affirmed.

Opinion of the Court of Errors and Appeals in the action brought by the State board of health to prevent the pollution of the Pequannock river.

State, ex rel. Board of Health of State of New Jersey, v. Ihnken.

Court of Errors and Appeals of New Jersey, June 19th, 1907.

Waters.—Provisions against pollution.—Repeal.

While Pub. Laws 1899, p. 73, "An act to secure the purity of the public supplies of potable waters," is repealed in so far as its provisions are repugnant to those of Pub. Laws 1899, p. 536, "An act to prevent the pollution of the waters of this State by the establishment of a State sewerage commission," yet permitting waste water from washing cans and bottles in a creamery, and from the washing of the floors thereof, to flow into a stream from which a city obtains its water-supply, being an act not placed within the cognizance of the sewerage commission by the later act, the power to invoke the aid of the Court of Chancery to restrain such action still remains in the State board of health under the former act.

Appeal from Court of Chancery.

Suit by the State, on relation of the Board of Health of the State of New



Jersey, against George Ihnken. From an adverse decree, defendant appeals. Affirmed.

William C. Cudlipp, for appellant. Edward D. Duffield and Robert H. Mc-Carter, attorney-general, for the State.

Gummere. C. J. The bill in this case was filed in the name of the State. on the relation of the State board of health, for an injunction to restrain the appellant, who was the defendant below, from permitting the waste water from the washing of cans and bottles, and the cleansing of the floors in his creamery, near Stockholm, in this State, to flow into and pollute a tributary of the Pequannock river, from which the city of Newark obtains its supply of water for domestic use. The bill was filed pursuant to authority conferred upon the State board by the provisions of "An act to secure the purity of the public supplies of potable waters in this State," approved March 17th, 1899 (P. L., p. 73). The first section of that act provides that "no sewage, drainage, domestic or factory refuse, excremental or other polluting matters of any kind whatsoever, which either by itself, or in connection with other matter, will corrupt or impair, or tend to corrupt and impair, the quality of the water of any river, brook, stream, or any tributary or branch thereof, or of any lake, pond, well, spring, or other reservoir from which is taken, or may be taken, any public supply of water for domestic use in any city, town, borough, township of other municipality of this State, or which will render or tend to render such water injurious to health, shall be placed in or discharged into the waters, or placed or deposited upon the ice, of any such river, brook, stream, or any tributary or branch thereof, or of any lake, pond, well, spring or other reservoir, above the point from which any city, town, borough, township or other municipality shall or may obtain its supply of water for domestic use; 'nor shall any such sewage, drainage, domestic or factory refuse, excremental or other polluting matter, be placed or suffered to remain upon the banks of any such river, brook, stream, or of any tributary of branch thereof, or of any lake, pond, well, spring, or other reservoir, above the point from which any city, town, borough, township or other municipality, shall or may obtain its supply of water for domestic use as aforesaid." No person or corporation is exempted from the provision of this statute, except municipalities which, at the date of the passage of the act, had a public sewer system legally constructed under municipal authority, discharging its drainage or sewage into any such river, brook, stream, &c.

Upon the hearing in the Court of Chancery, it was considered that the proofs made it clear that the defendant was engaged in polluting the waters of a tributary of the Pequannock river, about ten miles above the Newark intake, and that he was doing so within the prohibition of the act of the legislature just mentioned, as construed by the Court of Chancery, and subsequently by this court, in the case of State Board of Health v. Diamond Mills Paper Company, 63 N. J. Eq. 111, 51 Atl. 1019; S. C. on appeal, 64 N. J. Eq. 793, 53 Atl. 1125. We concur with the learned vice chancellor in his conclusion upon the facts, and in the view expressed by him that the acts of the defendant which are complained of are within the prohibition of the statute referred to. It is argued before us, however, that the act of March 17th, 1899, was repealed, by implication, by a subsequent statute passed in the same year, and entitled "An act to prevent the pollution of the waters of this State by the establishment of a State sewerage commission, and authorizing the creation of sewerage districts, and district sewerage boards, and prescribing, defining and regulating the powers and duties of such commission and such boards" (P. L. 1899, p. 536), and that for this reason the decree appealed from should be reversed, notwithstanding the fact that it is supported by the decision in the Diamond Mills Paper Company case.

In considering this question it is to be borne in mind that an inferential repeal of a statute is a pure question of intention, and that every reasonable intendment will be made against such result; that such destroying effect will be deemed to reside in the more recent statute only when it is absolutely irreconcilable with the prior one. Ruckman v. Ransom, 35 N. J. Law 565: Hotel Registry Corporation v. Stafford, 70 N. J. Law 528, 57 Atl. 145. And this is peculiarly true with reference to statutes enacted at the same session of the legislature. If it is possible to do so, they should receive a construction which will give effect to each. Each is supposed to speak the mind of the same legislature, and the words used in each should be qualified and restricted, if necessary, in their construction, so as to give validity and effect to every other act passed at the same session. The presumption is that different acts passed at the same session of the legislature are imbued by the same spirit, and actuated by the same policy, and that one was not intended to repeal or destroy the other. Lewis' Sutherland Stat. Con., vol. 1, § 268.

The State sewerage commission statute of 1899 was revised and amended by the legislature of 1900 (P. L., p. 113). The amendments, however, made little change in the original statute, except by increasing the powers of the The question, therefore, to be determined is whether the provisions of the later act of 1899, as amended in the year 1900, are so manifestly inconsistent with, and repugnant to, the provisions of the earlier act, as to disclose a clear intent on the part of the legislature to repeal it. The State sewerage commission act, after prescribing for the composition of the commission, and the term of office of its members, imposes upon them the duty of investigating the various methods of sewage disposal, in order that it may be able to make proper recommendations in regard thereto; the investigating of all complaints of the pollution of the waters of the State which shall be brought to its notice, and if they shall find that any of the waters of the State are being polluted to the injury of any of its inhabitants, either in their health, comfort or property, to notify in writing any person, corporation or municipality found to be polluting such waters. It then provides that, prior to a time to be fixed by such commission, which time shall not be more than five years from the date of its notice, said person, corporation or municipality must cease to pollute said waters, and make such disposition of their sewage, or other polluting matter, as shall be approved by the State sewerage commission. It then confers upon any person, corporation or municipality aggrieved by the finding of the commission an appeal to the Court of Chancery, which court is empowered by the act to confirm the finding of the commission. or to reverse or modify it in whole or in part. The act then provides that it shall be unlawful for any person, corporation or municipality to build any sewer, drain or sewerage system from which it is designed that any sewage or other harmful and deleterious matter, solid or liquid, shall flow into any of the waters of this State, so as to pollute, or render impure, such waters, except under such conditions as shall be approved by the State sewerage commission, but declares that this provision shall not be deemed to prehibit the use or extension of existing sewers, drains or sewerage systems, unless the person, corporation or municipality controlling the same shall be served with a notice to cease pollution, as thereinbefore provided. It then provides that it shall be unlawful for any person, corporation or municipality to build, or cause to be built, or operate, any plant for the treatment of sewage, or other polluting substance, from which the effluent is to flow into any of the waters of this State, except under such conditions as shall be approved by the State sewerage commission, to whom plans shall be submitted before building, and, further, that it shall be unlawful for any person, corporation or municipality, after the date specified in the notice before mentioned, to permit or allow any sewage, or other polluting matter, to flow into said waters from any sewer, drain, or sewerage system, except under such conditions as shall be approved by the State sewerage commission. Authority is then conferred upon the elommission to apply to the Court of Chancery for an injunction to prevent violations of the provisions of the act.

It seems quite clear, from a reading of the provisions of this act, that the powers conferred upon the State sewerage commission are much less extensive than those conferred upon the State board of health by the earlier statute. The sewerage commission is only to take proceedings where actual pollution of the waters of the State is shown to exist; whereas, the State board of health is authorized to invoke the aid of the Court of Chancery whenever the polluting matter, either by itself, or in connection with other matter, corrupts or impairs, or tends to corrupt or impair, the stream from which any municipality obtains its water-supply. The State sewerage commission, before applying to the Court of Chancery for its injunction, must first notify the offending party to stop the pollution of the water, and must fix the time within which the pollution shall cease; whereas, the State board of health may sue out an injunction to restrain the forbidden acts immediately upon ascertaining their The State board of health may restrain the deposit of all kinds of polluting matter upon the ice of any stream, or upon the banks thereof, while the supervision of the State sewerage commission would seem to be limited to such pollution as comes from sewers, drains, sewerage systems, or sewerage disposal works. It is, of course, apparent, from an examination of the two statutes, that the powers conferred upon the State board of health by the earlier acts have been considerably modified and restricted by the later act; but this fact affords no ground for imputing to the legislature an intent to repeal the earlier act in toto. Bearing in mind the settled rule of construction in determining whether a statute has been repealed by implication, all that can be said in the present case is that such of the provisions of "An act to secure the purity of public supplies of potable waters in this State" as are repugnant to the provisions of the later statute are repealed, and that the remaining portions thereof are unaffected by the later act,

The conduct of the appellant which is made the ground of its action by the State board of health, namely, the permitting waste water from the washing of cans and bottles in his creamery, and from the cleansing of its floors, to flow into a tributary of the Pequannock river, a stream from which the city of Newark obtains its water-supply, is an act not placed within the cognizance of the State sewerage commission by the statute which created that body. The power to invoke the aid of the Court of Chancery to restrain such action, therefore, still remains with the State board of health.

The decree appealed from should be affirmed.

Actions were brought to prevent pollutions of public water-supplies in the following cases: John Forgerson, premises located on the Pequannock water shed. The nuisance was abated. Gustav and Emma Gnauch, premises located on the Hackensack water shed. Nuisance abated and permanent injunction issued. Samuel Card, premises located on the Pequannock water shed. Nuisance abated. James Leech, action pending. Maria Davenport, nuisance abated.

# New Jersey Sanitary Association.

The meeting of the New Jersey Sanitary Association for 1907 was held in conjunction with that of the American Public Health Association, in Atlantic City, Tuesday, October 1st. The following program was presented:

Invocation-Rev. H. M. Gesner, pastor First Presbyterian Church, Atlantic City. Introductory Remarks and Announcements-Dr. E. Guion, chairman Executive Council. President's Address-"Evolution of Associations-The State Sanitary in Particular," Dr. G. K. Dickinson, Jersey City. Reports of Chairmen of Committees. Symposium on the Ideal Milk of the Future. Ideal Dairying and Transportation-Prof. R. A. Pearson, Ithaca, N. Y; Prof. E. B. Voorhees, New Brunswick. Ideal Milk-Natural, Pasteurized, Condensed, Dessicated—Sanitary and Dietetic Values. Ideal Methods of Local Distribution— Civic or Individual. Ideal Control-Government, State, Civic, Boards of Health or Commissions, the latter philanthropic or appointed by central authority. Medical Control-Dr. H. L. Coit, Newark. Municipal Control-Dr. Thomas Darlington, New York City. The general topic presented by Dr. C. B. Lane, of Washington, D. C. Discussion by Dr. Harvey W. Wiley, of Washington, D. C. Report of Treasurer. Report of Meeting of Executive Council. Election of officers. Adjournment. Officers for 1907 were as follows: President, Gordon K. Dickinson, M.D., Jersey City; first Vice President, John, B. Duncklee, C.E., S. Orange; second Vice President, Wm. G. Schauffler, M.D., Lakewood; third Vice President, Rudolph Hering, C.E., Montclair; secretary, James A. Exton, M.D., Arlington; treasurer, George P. Olcott, C.E., East Orange; ch. ex. council, Edward Guion, M.D., Atlantic City.

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# Circulars and Laws.

During the legislative session of 1907 the following bills relating to the public health were introduced:

#### ASSEMBLY BILLS.

\*No. 51, Mr. Brady. Authorizes cities having a public water-supply derived from sources beyond the city limits; in order to protect such water from pollution, to maintain a system of drains and sewers for intercepting all sewage and other polluting matters; the construction of such sewers shall be approved by the State board of health; a bond issue is authorized not to exceed \$100,000. (Public Health.)

No. 54, Mr. Mead. Provides for a board for the examination and licensing of plumbers, consisting of four members, in all cities having a public system of sewers; one of these shall be chief health inspecting officer, one a journey-man plumber, one the plumbing inspector, and one a master plumber; all to be appointed by the board of health; the fee for the original licensing of a journeyman plumber is \$1; for a master plumber, \$5; renewal fees, \$1; it is made unlawful to do any plumbing without a license. (Public Health.)

No. 105, Mr. Corish. Makes it a misdemeanor, punishable by fine of not more than \$200, or one year's imprisonment, for selling cocaine or any remedy containing cocaine, except by prescription or notice that such remedy contains cocaine. (Public Health.)

No. 120, Mr. Hahn. Authorizes the State board of health to prescribe and fix territorial limitations whenever any sewer system is constructed under any board of health, wherein such State board of health shall regulate or prohibit the use of toilets, water closets and urinals on railroad trains and other vehicles. (Public Health.)

No. 178, Mr. Baader. Prohibits and forbids every municipality, corporation and individual from discharging directly or indirectly any sewage or other polluting matter into the waters of the Passaic river or any of its tributaries at any point between the falls in Paterson and the mouth of the river in Newark bay after December 12th, 1912, and authorizes the Passaic Valley sewerage commissioners to enforce the act. Any one violating its provisions after such date the Court of Chancery is vested with special jurisdiction to enforce the act in a summary manner. The sewerage commissioners shall submit maps, plans and specifications for the construction of a joint trunk or main intercepting sewer or sewers for such municipalities as lie within the Passaic Valley sewerage district. These municipalities may enter into contract with the sewerage commission for the construction, maintenance and operation of such sewers, the cost of which shall be by the contract apportioned annually to the respective municipalities entering therein according to

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the amount of sewage by each delivered or discharged. Upon such contract being made, the commissioners shall have full power to purchase and acquire lands, &c., necessary for constructing such sewer, and are given the power of condemnation. The bill provides in detail for this work. (Public Health.)

No. 230, Mr. Wright. Amends the act establishing the tuberculosis sanatorium relative to the admission of inmates, and giving the details as to such admission. (Public Health.)

No. 255, Mr. Klenert. Authorizes municipalities to establish and maintain plants for the treatment, disposal or rendering of sewage. (Municipal Corporations.)

No. 281, Mr. Morris. Requires the State Treasurer to pay for any products of the farm destroyed by the order of the State board of health; in case of destruction by local boards the municipal body shall pay therefor. (Public Health.)

No. 286, Mr. Crowther. Authorizes the State board of health to provide necessary laboratories, apparatus, materials and other requirements necessary to make, prepare and distribute through the local boards of health diphtheria antitoxin to the people of the State. (Public Health.)

No. 338, Mr. Pawelski. Amends the act to prevent the adulteration of food or drugs, and defines what shall be an adulteration of drugs, food or drink. (Agriculture.)

No. 348, Mr. Lane. Authorizes cities of the first class to use all or a portion of real estate they may own for the purpose of a tuberculosis hospital. (Municipal Corporations.)

\*No. 354, Mr. Taylor. Makes it unlawful to construct or maintain any hospital, sanitarium or other building for the treatment or cure of pulmonary tuberculosis, or infectious, contagious or communicable disease within one-quarter of a mile from any building used or designed as a dwelling without the consent of the govering body of the municipality within which the building is to be located. Notice must be given of the application for such consent. (Public Health.)

\*No. 363, Mr. Moxson. Authorizes cities through which any river, stream or creek runs and into which the sewage of any city empties, to build and construct intercepting sewers, to receive and dispose of such sewage, and issue bonds to meet the expense thereof. (Municipal Corporations.)

No. 379, Mr. Hahn. Establishes a board of examiners of registered nurses consisting of five members to be appointed by the governor. They shall make all necessary rules and regulations and provide for the examining and licensing of nurses. (Miscellaneous Business.)

No. 412, Mr. Tumulty. Makes it lawful for any city in localities having local boards of health to make complaint for violation of the health code. (Public Health.)

No. 416, Mr. Buck. Provides for the establishment of the bureau of electrical equipment, to be under the general supervision of the State board of health, which shall have control and direction of the placing and maintaining in streets and highways of electrical wires, conduits and equipments. Hereafter no person or corporation shall erect or construct any street railway, electric lighting, telephone or telegraph system until the plans and specifications are approved by said bureau. (Corporations.)

No. 445, Mr. Perkins. Authorizes the board of health of any city owning its own water works to certify to the governing body that a filtration plant is necessary for the preservation of the health of the city, and such governing body may appoint two of their own members to be known as the filtration commission.

Provision is made for the issuing of bonds for the construction of such plant, not to exceed one per cent. of the taxable values in said city. (Corporations.)

No. 469, Mr. Lane. Regulates the practice of osteopathy and providing for a State board of examiners of seven members to be appointed by the governor, which shall examine and license persons wishing to practice osteopathy. (Miscellaneous Business.)

No. 481, Mr. Riordan. Provides that in first class cities there shall be established a department for the supervision of the city board of health. This department to have control and direction of the placing, establishing and maintaining in buildings of all electrical appliances. Board of aldermen shall appoint a practical electrician or gas engineer to have charge of the department for term of one year at such salary as board shall fix. (Corporations.)

#### SENATE BILLS.

No. 55, Mr. Gebhardt. Amends the pure food law in regard to the production and sale of dairy products. (Public Health.)

\*No. 83, Mr. Ackerman. Provides for the incorporation of pathological and anatomical associations for the advancement of medical and surgical science; gives any three or more physicians authority to form such organizations; authorizes officials of public institutions to deliver to such organizations dead bodies in their possession not claimed by relatives; provides a penalty for trafficking in dead bodies. (Corporations.)

\*No. 107, Mr. Frelinghuysen. Amending the law regarding the establishment and government of a sanatorium for tuberculosis patients; gives admittance to applicants who have resided in the State a year; requires payment for treatment by persons who have means to pay; requires that municipalities sending indigent patients to pay for their treatment, and regulates manner of receiving for patients. (Public Health.)

\*No. 116, Mr. Hillery. Establishes a State water-supply commission; provides for five members to be appointed by the governor; gives the commission general supervision over all the sources of water-supply, to the end that the same may be preserved for the benefit of the people of the State. (Municipal Corporations.)

\*No. 168, Mr. Frelinghuysen. An act prohibiting the sale of impure foods. drugs, beverages, candy, condiments. (Public Health.)

No. 190, Mr. Robbins. Provides for the construction of sewers and sewer systems, for the issuance of bonds for the cost thereof, and for the collection of rentals for the use of such sewers. (Municipal Corporations.)

No. 197, Mr. Cornish. Requires that packages or bottles of medicines not compounded by prescription shall contain the formula, also information as to the quantity of alcohol and the drugs used in the preparation. (Public Health.)

\*No. 204. Empowers State sewerage commission to inspect streams suspected of being polluted, and to compel cessation of such pollution, with power to ask for injunction. (Public Health.)

No. 233, Mr. Frelinghuysen. Authorizes municipalities to contract with each other respecting the disposal of sewage. (Boroughs and Townships.)

No. 241, Mr. Wakelee. Prohibits bringing into New Jersey garbage from another State. Penalty \$1,000 fine or six months' imprisonment. (Public Health.)

No. 255, Mr. Hutchinson. Empowers cities to construct sewers or drains,

notwithstanding the objections of property owners, when the board of health declares that such improvements are necessary for the public welfare. (Municipal Corporations.)

No. 258, Mr. Frelinghuysen (by request). Places all cities and municipalities under the law of June 8th, 1906, entitled "An act to enable any city in this State, other than cities of the first class, to construct, purchase or otherwise acquire water works for the purpose of supplying pure and wholesome water for public and private use in said city or in adjoining municipalities, and providing for the maintenance of the same." (Municipal Corporations.)

No. 283, Mr. Colby. Provides that all jails must give each inmate at least eighteen square feet of floor space in each cell, and not less than 200 feet of air space, and that each jail shall be provided with a system of ventilation whereby fresh air will be supplied at the rate of not less than twenty cubic feet per minute for each inmate. (State Prison.)

No. 284, Mr. Colby. Provides that suits in violation of the code, when complaint is made by an individual, shall be prosecuted in the name of the

board of health. (Public Health.)

No. 301, Mr. Frelinghuysen. Regulates and controls the construction, cleanliness and location of slaughter-houses, abattoirs and places where animals are slaughtered for sale for human food, and to provide for the licensing of such establishments. (Public Health.)

No. 336, Mr. Wakelee. Repeals "An act to recover the purity of the public supply of potable waters in this State," approved March 17th, 1899. (Judiciary.)

No. 341, Mr. Frelinghuysen. Amends oleomargarine law by requiring that a defendant shall file a bond for double the amount of the judgment before an appeal is allowed. (Public Health.)

No. 349, Mr. Frelinghuysen. Requires physicians to report to the board of health all cases of malaria, tuberculosis, trachoma, rabies, glanders or chicken-pox within twelve hours after the discovery of them. (Public Health.)

No. 350, Mr. Shinn. Prohibits employes of railroads, or manufacturers of foods, &c., from acting as deputy inspectors of foods. (Public Health.)

\*No. 168, pure food bill, was amended so as to permit the use of benzoate of soda.

No. 367. Gives State board of health power to compel abatement of nuisances in slaughter-houses. Immediately reported and placed on second reading, and passed finally. Fixes penalty of \$50.

<sup>\*</sup>These bills became laws.

## CIRCULARS.

The following circulars are now in print and ready for distribution:

No. 89.—Bulletins Nos. 3 and 4.

No. 94.—Contagious Diseases of Animals.

No. 97.—Illuminating Oils.

No. 98.—Restriction of Communicable Diseases.

No. 100.—Transportation of the Dead.

No. 101.—Births, Marriages and Deaths.

No. 103.-Food and Drugs.

No. 104.-Prevention of Small-pox.

No. 105.-State Laboratory of Hygiene.

No. 110.—Sanitary Inspection Service.

No. 112.—Restriction of Spread of Malaria.

No. 113.—Collection of Samples of Water.

No. 114.—Prevention of Anthrax.

No. 115.—Prevention of Tuberculosis.

No. 116.-Clean Milk.

No. 117.-Revision of Food and Drug Act.

No. 118.—Public Health Laws.

#### CIRCULAR 117. JULY, 1907.

The act approved May 20th, 1907 (Chapter 217 of the Laws of 1907), which is printed in this circular, does not become operative until October, 1908, but it is published at this time to supply the demand for information concerning the provisions of the new law. It will be found to differ very little from the statutes which now govern the sale in New Jersey of adulterated and unwholesome food, except that it also contains the most important provisions of the Federal act of June 30th, 1906. It is in fact a revision of the laws at present in effect, with the addition of the provisions of the Federal act, thus causing the requirements relating to the sale of food and drugs within the State to conform very closely to those which relate to interstate regulations.

#### CHAPTER 217 OF THE LAWS OF 1907.

An Act to secure the purity of food, beverages, confectionery, condiments, drugs and medicines, and to prevent deception in the distribution and sales thereof (Revision of 1907).

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. No person shall distribute or sell, or manufacture for distribution or sale, or have in his possession with intent to distribute or sell, any article of food or drug which under any of the provisions of this act is or shall be deemed to be adulterated or misbranded.

- 2. The term "drug," as used in this act, shall include all medicines and preparations recognized in the United States Pharmacopæia or National Formulary for internal or external use, and any substance or mixture of substances intended to be used internally or externally for the cure, mitigation or prevention of disease of man or animal; the term "food," as used in this act, shall include every article used for food or drink by man or animal, and every ingredient of such article, and all confectionery and condiments.
  - 3. For the purposes of this act an article shall be deemed to be adulterated—In case of drugs:

First. If, when a drug is sold under or by a name recognized in the United States Pharmacopæia or National Formulary, it differs from the standard of strength, quality or purity as determined by the test laid down in the United States Pharmacopæia or National Formulary official at the time of investigation.

Second. If its strength or purity fall below the professed standard or quality under which it is sold.

In the case of confectionery:

If it contains terra alba, barytes, talc, chrome yellow or other mineral substance, or poisonous color or flavor, or other ingredient deleterious or detrimental to health, or any vinous, malt or spirituous liquor or compound or narcotic drug.

In the case of food:

First. If any substance has been mixed or packed with it so as to reduce or lower or injuriously affect its quality or strength.

Second. If any substance has been substituted wholly or in part for the article.

Third. If any valuable constituent of the article has been wholly or in part abstracted.

Fourth. If it be mixed, colored, powdered, coated or stained in a manner whereby damage or inferiority is concealed.

Fifth. If it contain any added poisonous or other added deleterious ingredient which may render such article injurious to health; provided, that when in the preparation of food products for shipment they are preserved by any external application applied in such manner that the preservative is necessarily removed mechanically, or by maceration in water, or otherwise, and directions for the removal of said preservative shall be printed on the covering of the package, the provisions of this act shall be construed as applying only when said products are ready for consumption.

Sixth. If it consists in whole or in part of a filthy, decomposed or putrid animal or vegetable substance, or any portion of an animal unfit for food, whether manufactured or not, or if it is the product of a diseased animal, or one that has died otherwise than by slaughter.

4. The term "misbranded," as used herein, shall apply to all drugs, or articles of food, or articles which enter into the composition of food, the package or label of which shall bear any statement, design or device regarding such article, or the ingredients or substances contained therein, which shall be false or misleading in any particular, and to any food or drug product which is falsely branded as to the state, territory or country in which it is manufactured or produced.

For the purposes of this act, an article shall also be deemed to be misbranded—

In case of drugs:

First. If it be an imitation of or offered for sale under the name of another article.

Second. If the contents of the package as originally put up shall have been removed, in whole or in part, and other contents shall have been placed in such package, or if the package fail to bear a statement on the label of the quantity or proportion of any alcohol, morphine, opium, cocaine, heroin, alpha or beta eucaine, chloroform, cannibis indica, chloral hydrate, acetanilide, acetphenetidine, phenacetin or antipyrin, or any derivative or preparation of any such substances contained therein; provided, that nothing in this subdivision contained shall be construed to apply to such preparations as are specified and recognized by the United States Pharmacopæia or National Formulary, which are in accordance therewith, or to the filling of written prescriptions furnished by practicing physicians, dentists or veterinarians, the originals of which prescriptions are retained and filed by the druggist; and provided further, that nothing in this act contained shall be construed to apply to such drugs or medicines as are personally dispensed by legally licensed physicians, dentists or veterinarians in the course of their practice as such physicians, dentists or veterinarians.

In the case of food:

First. If it be an imitation of or offered for sale under the distinctive name of another article.

Second. If it be labeled or branded so as to deceive or mislead the purchaser, or purport to be a foreign product when not so, or if the contents of the package as originally put up shall have been removed, in whole or in part, and other contents shall have been placed in such package, or if it fail to bear a statement on the label of the quantity or proportion of any morphine, opium, cocaine, heroin, alpha or beta eucaine, chloroform, cannabis indica, chloral hydrate, acetanilide, acetphenetidine, or phenacetin or antipyrin, or any derivative or preparation of any such substances contained therein.

Third. If in package form, and the contents are stated in terms of weight or measure, they are not plainly and correctly stated on the outside of the package. Fourth. If the package containing it or its label shall bear any statement, design or device regarding the ingredients or the substances contained therein, which statement, design or device shall be false or misleading in any particular.

5. No article shall be deemed to be adulterated or misbranded within the meaning of this act when specially prepared for export to any foreign country, if such article shall be prepared and packed according to the directions of the foreign purchaser, and if no substance is used in the preparation or packing of such article which is prohibited by the laws of the foreign country for export to which said article was prepared; provided, that if such article shall be sold or offered for sale for use or consumption within the United States of America, then all the provisions of this act, with regard to adulteration and misbranding, shall apply thereto; and provided further, that all food products manufactured in this State during the year one thousand nine hundred and seven, in which preservatives are used, which preservatives are not now specifically prohibited by the Department of Agriculture of the United States, shall be exempt from the provisions of this act; provided, the use of such preservatives is stated upon the label or in branding such products, and also the date of their manufacture.

6. No person shall distribute or sell, or have in his possession with intent to distribute or sell, any milk which contains less than twelve per centum of milk solids, or more than eighty-eight per centum of watery fluids, or less than three per centum of milk fats; provided, however, that milk especially prepared for infant feeding, and sold in containers having a capacity of not more than ten fluid ounces each, shall not be deemed to be adulterated although pure water may have been added thereto or the standard thereof may differ from the

standards fixed by this section, if each container shall have securely affixed to it a tag or label on which is plainly and legibly marked the words "modified milk for infant feeding," and also a true statement of the percentage of each ingredient of the milk in such container.

- 7. No person shall distribute or sell, or have in his possession with intent to distribute or sell, any cream which contains less than sixteen per centum of milk fats, unless the amount of milk fat contained therein is plainly and legibly marked on the outside of every can, bottle, vessel or container in which such cream is kept, stored, shipped, transported, or from which it is sold.
- 8. No person shall distribute or sell, or have in his possession with intent to distribute or sell, any milk or cream which contains any water, drug, chemical, preservative, coloring matter, condensed milk or any substance of any kind or character which has been added thereto or mixed therewith, or any milk or cream which is the product in whole or in part of any animal kept in a crowded, uncleanly or unhealthy place or condition, or which is the product in whole or in part of any animal fed on swill, or any substance in a state of rottenness or putrefaction, or on any substance of an unwholesome nature, or on any feod or substance which may produce diseased or unwholesome milk. No person shall distribute or sell, or have in his possession with intent to distribute or sell, any milk or cream which is produced in whole or in part from any animal within fifteen days before or five days after parturition.
- 9. No person shall sell or offer or expose for sale, or have in his possession for the purpose of sale, any milk from which the cream or any part thereof has been removed, unless every can, vessel or package containing such milk shall have a metal label or tag of metal distinctly, durably and permanently soldered in a conspicuous place upon the outside, and not more than six inches from the top thereof, with the words "skimmed milk" stamped, indented or engraved on the label or tag in letters not less than two inches in height, and the several lines of which shall not be less than three-eighths of an inch in width; provided, however, that every glass bottle, in lieu of such label or tag, may have blown in it the words "skimmed milk" in letters which shall not be less than one eighth of an inch in width; such milk shall only be sold or shipped in or retailed out of a can, bottle, vessel or package so marked.

10. No person shall distribute or sell, or offer for distribution or sale, or have in possession with intent to distribute or sell, any milk which has been produced in whole or in part by any animal which is not daily supplied with pure and wholesome water; and no person shall wash or attempt to cleanse any can, bottle, vessel or utensil used for handling or transporting milk which is intended for distribution or sale in water which is polluted, contaminated or impure.

- 11. No person having the possession or care of any milk which is intended for sale or distribution shall permit it to be exposed to, or contaminated by, the emanations, discharges or exhalations from any person sick with any contagious disease; and no person shall distribute or sell, or offer to distribute or sell, or have in his possession with intent to distribute or sell, any milk which has been so exposed or contaminated.
- 12. No person having custody of a milk can, bottle or other vessel used as a container for milk intended for sale or distribution shall place or permit to be placed therein any article or substance other than milk or its products, or water or other agent used for cleansing such can, bottle or vessel.
- 13. No person shall send, ship, return or deliver or cause or permit to be sent, shipped, returned or delivered to any producer, wholesaler or retailer of milk within this State any can, bottle or other vessel used as a container for milk containing any article or substance other than milk or its products.



- 14. It shall be the duty of any person, persons or corporation to whom milk is shipped by any person in this State, before returning to such shipper the can or vessel used for transporting such milk, to remove all milk from such can or vessel and to thoroughly rinse such can or vessel with pure water or to cause the same to be done; and it shall be the duty of any person, persons or corporation shipping milk to any point or points within or without this State to thoroughly cleanse, or cause to be cleansed, the can or vessel used for transporting such milk before the milk is placed therein.
- 15. No person shall in any way or manner erase, cancel, obliterate, deface, cover, remove or alter any brand, tag, label or other marking required by any of the provisions of this act to be attached or affixed to any can, vessel, package or other container.
- 16. No person shall distribute or sell, or offer for distribution or sale, or have in his possession with intent to distribute or sell, as cider vinegar or apple vinegar, any vinegar which is not produced exclusively by the alcoholic and subsequent acetous fermentations of the juice of apples, or is not laevorotatory, or the total amount of acid in one hundred cubic centimeters of which, calculated as acetic acid, is less than four grams, or which contains less than one and six-tenths grams of apple solids or less than twenty-five one-hundredths of one gram of apple ash in one hundred cubic centimeters. The water-soluble ash from one hundred cubic centimeters of the vinegar shall require not less than thirty cubic centimeters of deci-normal acid to neutralize its alkalinity, and shall centain not less than ten milligrams of phosphoric anhydride.
- 17. No person shall distribute or sell, or offer for distribution or sale, or have in his possession with intent to distribute or sell as wine vinegar or grape vinegar, any vinegar which is not produced exclusively by the alcoholic and subsequent acetous fermentations of the juice of the grape or the total amount of acid in one hundred cubic centimeters of which, calculated as acetic acid, is less than four grams, or which contains less than one and four-tenths grams of grape solids, or less than thirteen one-hundredths of one gram of grape ash in one hundred cubic centimeters.
- 18. No person shall distribute or sell, or offer for distribution or sale, or have in his possession with intent to distribute or sell, as malt vinegar, any vinegar which is not made exclusively by the alcoholic and subsequent acetous fermentations, without distillation, of an infusion of barley, malt or cereals whose starch has been converted by malt, or is not dextrorotatory, or the total amount of acid in one hundred cubic centimeters of which, calculated as acetic acid, is less than four grams, or which contains less than two grams of solids or less than two-tenths of one gram of ash in one hundred cubic centimeters. The water-soluble ash from one hundred cubic centimeters of the vinegar shall require not less than four cubic centimeters of deci-normal acid to neutralize its alkalinity, and shall contain not less than nine milligrams of phosphoric anhydride.
- 19. No person shall distribute or sell, or offer for distribution or sale, or have in his possession with intent to distribute or sell, as sugar vinegar, molasses vinegar or syrup vinegar, any vinegar which is not made exclusively by the alcoholic and subsequent acetous fermentations of solutions of a sugar, syrup, molasses or refiners' syrup, or the total amount of acid in one hundred cubic centimeters of which, calculated as acetic acid, is less than four grams.
- 20. No person shall distribute or sell, or offer for distribution or sale, or have in his possession with intent to distribute or sell, as glucose vinegar,



any vinegar which is not made exclusively by the alcoholic and subsequent acetous fermentations of solutions of starch sugar, glucose or glucose syrup, or is not dextrorotatory, or the total amount of acid in one hundred cubic centimeters of which, calculated as acetic acid, is less than four grams.

21. No person shall distribute or sell, or offer for distribution or sale, or have in his possession with intent to distribute or sell, as spirit vinegar, distilled vinegar or grain vinegar, any vinegar which is not made exclusively by the acetous fermentation of dilute distilled alcohol, or the total amount of acid in one hundred cubic centimeters of which, calculated as acetic acid, is less than four grams.

22. No person shall distribute or sell, or offer for distribution or sale, or have in his possession with intent to distribute or sell, any vinegar, the total amount of acid in one hundred cubic centimeters of which, calculated as acetic acid, is less than four grams, or which contains any mineral acid, any artificial coloring matter or any preservative.

23. No person shall distribute or sell, or offer for distribution or sale, or have in his possession with intent to distribute or sell, any vinegar contained in any barrel, vessel, bottle or package, unless such barrel, vessel, bottle or package bears a label or imprint thereon in legible type, designating the name and address of the manufacturer of the vinegar and the name of the particular kind of vinegar contained therein.

24. No person shall kill, or aid in killing for human food, any calf less than four weeks old. No person shall sell or offer for sale, or have in his possession with intent to sell, any calf which has been killed when less than four weeks old, or any of the meat of any such calf.

25. Every person who shall distribute or sell, or offer for distribution or sale, or have in his possession with intent to distribute or sell, any article of food or drug, shall, on the request therefor and the tender of the value thereof by any chief or other inspector appointed under the authority of this act, deliver to such chief or other inspector so much of any such article of food or drug as said chief or other inspector may request; if such request shall not be immediately granted said chief or other inspector shall thereupon have the power to demand and take so much of any such article of food or drug as such chief or other inspector may think proper, he, at the time of said demand and taking, tendering to the person in charge of such article of food or drug what he may deem to be the reasonable value thereof; said chief or other inspector shall, at the time of the delivery to him of such article of food or drug, or of his demanding and taking the same, divide the sample so delivered or demanded and taken in the presence of the person from whom the request or demand was made or of a witness or witnesses into two or more parts, and shall duly seal two or more of said parts each in a suitable can, vessel or package, and, at the time of taking such sample, shall tender, and, if accepted, shall deliver one part to the person of whom the request or demand was made, with a statement, in writing, signed by said chief or other inspector. that such sample is taken for the purpose of examination; and in any prosecution of any person for the violation of any provision of this act no proof of any analysis thereof shall be given in evidence by the prosecutor unless a part of the sample shall have been sealed up and tendered, with such writing as aforesaid. to the person of whom the request or demand was made; provided, however, that in any prosecution for the sale of food or drug in violation of this act, proof of the analysis of the article so sold may be given in evidence on the part of the prosecutor, notwithstanding the fact that the purchase of such article may have been made by some person other than the chief or other inspector appointed

under the authority of this act, if such article so sold in violation of this act shall immediately after such sale be delivered by the person so purchasing said article to the chief or any other inspector appointed under the authority of this act, and said chief or other inspector shall, upon such delivery to him, in the presence of the person from whom the request or demand was made or of a witness or witnesses, which witness may be the person who made the said purchase, divide the said article into two or more parts, and shall duly seal two or more of said parts, each in a suitable can, vessel or package and shall tender, and, if accepted, shall deliver to the person who sold the said article one part of such sample with a statement, in writing, signed by said chief or other inspector, that such sample is taken for the purpose of examination; the chief and every other inspector appointed under the authority of this act, whenever he has reason to believe that any of the provisions of this act concerning the sale or distribution of milk or cream, or the offering or exposing of milk or cream for sale, or the having of milk or cream in possession for the purpose of sale, is being violated, shall have power to open any can, vessel or package containing such suspected milk or cream, whether the can, vessel or package be sealed or locked or not, and whether it be in transit or not; and if, upon inspection, he shall believe that such milk or cream is being distributed or sold, or had in possession with intent to distribute or sell, or offered or exposed for sale, contrary to any of the provisions of this act, he may, in the presence of one or more witnesses, take a sample thereof and seal it in a can, vessel or package, and send the sample thus enclosed and sealed for analysis to any chemist appointed under the authority of this act; he may also, in any such case, condemn such milk or cream and pour it upon the ground.

26. The members of the State board of health and all chemists, inspectors and employes appointed by said board under authority contained in this act, shall have full and free access, ingress and egress to all places of business, factories, farms, buildings, hotels, restaurants, boarding-houses, carriages, cars, cans, vessels and containers used in the manufacture, sale, distribution or transportation of any article or product of food or drug; they shall also have power to examine and open any package, can or vessel containing or believed to contain any article of food or drug which may be manufactured or sold, or exposed for sale, or had in possession with intent to sell in violation of any of the provisions of this act, and may inspect the contents therein and may take therefrom samples for examination.

27. No person shall obstruct or in anywise interfere with any analyst, chemist, chief or other inspector or employe of the State board of health in the performance of any duty under this act.

28. Any standard of purity, quality or strength of any food or drug, the purity, quality or strength of which is not fixed by any law of this State, which standard has been or hereafter may be established and published by the Secretary of the Department of Agriculture of the United States of America, may be adopted by the board of health of this State by resolution duly adopted at a regular meeting of said board, which resolution shall be certified to the Secretary of State by the Secretary of the State board of health, and shall be published at the end of the session laws of the Legislature next thereafter published after the adoption of said resolution, and the standard of purity, quality or strength of any food or drug as fixed in said resolution shall take effect when so published; provided, however, that if any such standard so adopted shall be changed by the Secretary of said Department of Agriculture it shall not continue in effect in this State after such change has become effective.

29. No person shall sell, or offer or expose for sale, or have in his possession

with intent to sell, or manufacture for sale, any article of food or drug which differs in purity, quality or strength from the standard adopted and published in accordance with section twenty-eight of this act.

- 30. The board of health of any municipality in this State may enforce the provisions of this act within said municipality, and shall have the power to designate from among its sanitary inspectors one or more inspectors who shall be known as inspector or inspectors of foods and drugs of such municipality, and whose duties shall be, besides the usual duties of a sanitary inspector in such municipality, to aid in the enforcement of this act in such municipality, and who shall have within the limits of such municipality all the powers and authority given to any inspector appointed under the provisions of this act. Such board may also appoint one or more analysts.
- 31. The State board of health shall enforce the provisions of this act and shall have the power from time to time to adopt, promulgate and publish, by circular or otherwise, such general rules and regulations for the government of the analysts, chemists, chief inspector and such other inspectors and employes appointed by the said board as they may deem proper; they shall also have the power to give to any analysts, chemists or chief inspector, or other inspector or employe appointed by the said board, such orders concerning any performance of duty as they from time to time may deem proper; they shall also have the power from time to time to appoint such analysts, chemists, chief inspector and other inspectors and employes as they may deem proper, who shall hold their respective positions during the pleasure of said board and perform such general or special services as said board may by their general rules and regulations or by their special orders require, and to fix and allow to said analysts, chemists chief inspector and other inspectors and employes, respectively, such salaries, fees or compensation as the said board shall deem to be reasonable, which salaries, fees and compensation shall be paid out of the appropriations from time to time made by the Legislature for carrying out the provisions of this act; the said board shall have the power, and it shall be their duty, through said analysts, chemists, chief inspector and other inspectors and employes, and in such other ways as the said board may deem practicable, to make inquiries and investigations concerning alleged or probable violations of any of the provisions of this act, to cause any and all persons guilty of any violation thereof to be prosecuted under the provisions of this act, and, generally, to adopt, carry out and enforce such rules and regulations as shall promote the purposes of this act.
- 32. Every person who shall violate any of the provisions of the first, eighth, eleventh, sixteenth, seventeenth, eighteenth, nineteenth, twentieth, twenty-first, twenty-second, twenty-third or twenty-fourth sections of this act shall be liable to a penalty of fifty dollars for the first offense, one hundred dollars for the second offense and two hundred dollars for the third and each subsequent offense.
- 33. Every person who shall violate any of the provisions of the twenty-seventh section of this act shall be liable to a penalty of one hundred dollars for the first offense and to a penalty of two hundred dollars for the second and each subsequent offense.
- 34. Every person who shall violate any of the provisions of the sixth section of this act shall be liable to a penalty of twenty-five dollars for the first offense and to a penalty of fifty dollars for the second and each subsequent offense; provided, however, that in any such case it shall be the duty of the Board of Health of the State of New Jersey or the local board of health, as the case may be, within forty-eight hours after making an analysis to cause

to be mailed to the person charged with such violation a notice, stating that an analysis of the milk taken from the possession of such person has shown the same to be below the statutory standard with regard to solids, and that therefore such person is guilty of a violation of this act, and stating the liability incurred by such person by reason of such violation. In case the person charged with such violation has not previous thereto paid a penalty for any alleged violation of this act, or has not been convicted of any violation of this act, and shall within fifteen days after the mailing of said abovementioned notice pay to the Attorney-General of this State, for the use of the State, or to the local board of health, for the use of the municipality, as the case may be, a penalty of fifteen dollars, no action for the recovery of a penalty shall be commenced against such person for said violation; provided further, that hereafter the payment of a penalty for an alleged violation of this act, either before or after the institution of proceedings for the collection thereof, shall for the purposes of this subdivision be deemed equivalent to a conviction of the violation for which such penalty was paid.

It shall be a sufficient mailing of the notice required by this subdivision if the same is deposited in the post-office, postage prepaid, addressed to the name and address given by the person in charge of the milk from which such sample was taken, to the inspector or other person who took the said sample, as the name and address of the owner of the said milk from which such sample was taken.

- 35. Every person who shall violate any of the provisions of the seventh, ninth, tenth, fifteenth or twenty-ninth sections of this act shall be liable to a penalty of twenty-five dollars for the first offense and to a penalty of fifty dollars for the second and each subsequent offense.
- 36. Every person who shall violate any of the provisions of the fourteenth section of this act shall be liable to a penalty of ten dollars for each can, bottle or vessel returned or used in violation of said section or any of its provisions.
- 37. Every person who shall violate any of the provisions of the twelfth or thirteenth sections of this act shall be liable to a penalty of twenty-five dollars for each offense.
- 38. Payment of a penalty for any alleged violation of this act, either before or after the institution of proceedings for the collection thereof, shall, for the purposes of this act, be deemed equivalent to a conviction of the violation for which such penalty was claimed.
- 39. When any person shall violate any of the provisions of this act by manufacturing or producing any article of food or drug for distribution or sale, or by having any such article in possession with intent to distribute or sell, or by offering or exposing any such article for sale at different manufactories or places of business or in different wagons or conveyances on the same day or at the same time, the manufacture or production for distribution or sale, or possession with intent to distribute or sell, or offering or exposing for sale of any such article in violation of any of the provisions of this act at each such manufactory, place of business, or in each such wagon or conveyance, on the same day or at the same time, shall be deemed a separate and distinct violation of this act.
- 40. Any and all penalties prescribed by any of the provisions of this act shall be recovered in an action of debt by and in the name of the Board of Health of the State of New Jersey, or by and in the name of any board of health of any municipality of this State, as the case may be, as plaintiff. The pleadings shall conform, in all respects, to the practice prevailing in

the court in which any such action shall be instituted, but no pleading or process shall be set aside or invalidated by reason of any formal or technical defects therein if the same contain a statement of the nature of the alleged violation and of the section of this act alleged to have been violated, and upon the attention of the court being called to any such formal or technical defect the same shall be immediately corrected and the said pleading or process amended as a matter of course, and as to all other defects in pleadings or process the same may be amended, in the discretion of the court, as in any other action or proceeding in said court.

- 41. When judgment shall be rendered against any defendant other than a body corporate execution shall be issued against his goods and chattels and body without any order of the court for that purpose first had and obtained. If the officer executing any such writ shall be unable to find sufficient goods and chattels of said defendant in his balliwick to make the amount of said judgment he shall take the body of the said defendant and deliver him to the keeper of the common jail of said county there to be detained until discharged by the court in which such judgment was obtained, or by one of the justices of the Supreme Court when such court or justice shall be satisfied that further confinement will not result in the payment of the judgment and costs. In case judgment shall be rendered against a body corporate execution shall be issued against the goods and chattels of such body corporate as in other actions of debt.
- 42. All penalties collected under the provisions of this act shall be paid into the treasury of the State of New Jersey.
- 43. The word "person," as used in this act, shall be construed to import both the plural and the singular, as the case may demand, and shall include corporations, companies, societies and associations, as well as individuals. When construing and enforcing any provision of this act, the act, omission or failure of any officer, agent or other person acting for or employed by any individual, corporation, company, society or association within the scope of his employment or office, shall in every case be deemed to be the act, omission or failure of such individual, corporation, company, society or association, as well as that of the person.
- 44. Whenever any person shall violate any of the provisions of this act it shall be lawful for the State board of health, either before or after the institution of proceedings for the collection of the penalty imposed by this act for such violation, to file a bill in the Court of Chancery in the name of the State at the relation of such board for an injunction to restrain such violation and for such other or further relief in the premises as the Court of Chancery shall deem proper, but the filing of such bill, nor any of the proceedings thereon, shall not relieve any party to such proceedings from the penalty or penalties prescribed by this act for such violation.
- 45. Whenever any member of the State board of health or any chief or other inspector appointed under the authority of this act shall find any meat, milk, fish, bird, fowl, vegetable or other food of a perishable nature exposed or offered for sale, or had in possession with intent to sell, in violation of any of the provisions of this act, or in a state of rottenness or putrefaction, or in any condition which renders it in his opinion unwholesome or unfit for use for human food, he shall condemn the same and cause it to be destroyed or disposed of in such a manner as to make it impossible to be thereafter used for human food.
- 46. No dealer shall be prosecuted under the provisions of this act for distributing or selling, or having in his possession with intent to distribute or

sell, any article of food or drug which under any of said provisions shall be deemed to be adulterated or misbranded; provided, that said article of food or drug is distributed or sold or had in possession with intent to distribute or sell in the original unbroken package in which it was received by said dealer: and provided further, that he can establish a guaranty, signed by the wholesaler, jobber, manufacturer, or other person residing in the United States, from whom he purchased such article, to the effect that the same is not adulterated or misbranded within the meaning of this act, designating it. Said guaranty, to afford protection, shall contain the name and address of the person making the sale of such article to such dealer, and in such case, said person, if he is a resident of this State, shall be amenable to the prosecution, fines and other penalties which would attach in due course to the dealer under the provisions of this act. If the guaranty is signed by a person who resides outside of this State, then the board of health of this State shall report the facts in the case to the Secretary of Agriculture of the United States, or the proper officer appointed for the enforcement of the act of Congress, entitled "An act for preventing the manufacture, sale or transportation of adulterated or misbranded or poisonous or deleterious foods, drugs, medicines and liquors, and for regulating traffic therein, and for other purposes," approved June thirtieth, one thousand nine hundred and six.

47. Nothing in this act contained shall be construed to repeal, affect or impair the provisions of an act of the Legislature of this State entitled "A further supplement to an act entitled 'An act to secure the purity of foods, beverages, confectionery, condiments, drugs and medicines, and to prevent deception in the distribution and sales thereof,' approved March twenty-first, one thousand nine hundred and one," approved April twentieth, one thousand nine hundred and six, but said act shall continue in force as if this act had not been passed. All penalties imposed by said act shall be collected by an action of debt brought by and in the name of the Board of Health of the State of New Jersey, in accordance with the provisions of the fortieth and forty-first sections of this act.

48. Nothing in this act contained shall be construed to repeal, affect or impair the provisions of an act of the Legislature of this State entitled "An act to prevent deception in the sale of oleomargarine, butterine or any imitation of dairy products, and to preserve the public health," approved March twenty-second, one thousand eight hundred and eighty-six, or the acts supplementary thereto or amendatory thereof, but said act and its supplements and amendments shall continue in force as if this act had not been passed.

49. In case for any reason any section or any provision of this act shall be questioned in any court, and shall be held to be unconstitutional or invalid, the same shall not be held to affect any other section or provision of this act.

50. The State board of health may expend annually, for the purposes of carrying out the provisions of this act, a sum not exceeding twenty thousand dollars, which sum shall be paid by the Treasurer of this State upon the warrants of the Comptroller; provided, however, that an appropriation therefor shall first be made by the Legislature.

51. This act shall take effect on the first day of October, one thousand nine hundred and eight.

Approved May 20th, 1907.

## REPORT

OF THE

# Bureau of Vital Statistics

OF THE

# STATE OF NEW JERSEY

FOR THE

Year Ending December 31st, 1906.

(261)

# Introduction.

The purpose for which records of vital statistics are collected and preserved may be to establish the right of some individual to vote; to sustain a claim in a pension case; to prove a right of inheritance, or to show eligibility for appointment as a member of the police, fire or other public service. But more important than any of these considerations is the measure afforded by these facts concerning the relative strength and vigor of the population. From these records we learn the average duration of life of the citizens of the State, and of those who dwell in each statistical division or district, and what influence upon health and strength is exerted by various trades, occupations and dwelling-places. In these records is found justification for the application of the laws of hygiene, for it is observed that high death rates uniformly attend certain conditions which are universally known to be un-Almost all of these unhealthful influences are preventable, and they may be averted or removed by the exercise of the well-understood precautions which prevent needless pollution of air, soil and water.

Concerning the general public utility of records of births, marriages and deaths, Beneki, the statistician of the German government, has said: "Mortality statistics constitute the basis of public as well as private action for the protection of health, and every fact learned concerning the causes which prevent premature deaths assists in prolonging the working power of individuals and promotes the general welfare of the nation."

The Austrian Minister of Commerce has said: "Statistics relating to births, marriages and deaths are no longer used as a mere theoretical science for the gratification of the curiosity of the learned, since they subserve the practical ends of political society and lend service to administration as well in determining the value of existing institutions and laws as in weighing measures not yet carried out."

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An eminent American writer says: "The adoption of the numerical method in dealing with births and deaths marks the application of sanitation to the prevention of disease for the facts obtained by registration of vital statistics enable the health officer to direct his efforts for the improvement of conditions which are thus proved to be unhealthful. Vital statistics may therefore be regarded as finger-boards pointing to the sanitary measures which will be most effectual in prolonging human life."

Mortality records have shown that the death rate varies from fifteen to eighty per thousand in different places, and study of local conditions has shown that this wide variation is due to personal and domestic factors, and to certain avoidable influences, and it is upon the foundation afforded by these facts that the art of hygiene is founded.

The discoveries concerning the relation of excremental contamination to cholera and typhoid fever were the direct result of the statistical methods of investigation, and the most important sanitary reforms which have occurred during the past century have followed as a result of the collection and publication of records showing the morbidity and mortality tables of the locality. In this manner "many districts which statistical returns have shown to be in the worst condition have become the best."

Another writer says: "One of the first great objects of sanitary organization should be to watch the death rate; to watch it not only over a city or parish, but in detail; to watch it with due regard to differences of sex, age and circumstances; to watch it from month to month, and even from week to week; to watch it as affected by different diseases, and particularly with reference to the communicable diseases, and such as we believe to be preventable; and this done, to make known the facts from time to time to those who are chiefly concerned in sanitary evils and their removal, so as effectually to bring home the immense significance of the facts taught by these figures."

The method which is at present in operation in New Jersey for the collection and preservation of returns of births, marriages and deaths has been employed since 1878. Previous to that year local records were written in a few localities, and the books prepared by local registrars were forwarded to the Secretary of State, Trenton. All of these records are now on file in the office of the

Bureau of Vital Statistics, and, together with the more recent returns, they are available for study and reference.

Certificates of Births.—The Legislature has made the following provision relating to the reporting of births:

"That it shall be the duty of the physician or midwife present at the birth of any child born in this State, and in case there be no physician or midwife present, then of the parents or either of them, to transmit, within thirty days after such birth, to the officer hereinafter designated, a certificate of such birth, which certificate shall set forth particularly, as far as they can be obtained, the day of the month and year of the birth, the township, city or municipality, and the county, in which the birth occurred, the name of each of the parents, the maiden name of the mother, the birthplace, residence and occupation of each of the parents, the sex and color of the child, the name of the child, if it be named, and the name of the attending physician or midwife, if any there be; it shall also be the duty of the assessor of every township, and of the clerk or the person acting as registrar of vital statistics in every city, borough, town or other local municipal government, between the first and tenth days of April, in each and every year, to mail to each physician or midwife residing in such township, city, borough, town or other local municipal government, or to supply to every such physician or midwife on application therefor, twelve envelopes of proper size, each with a two-cent postage stamp thereon, to be provided at the expense of the township, city, borough, town or other local municipal government, for the use of said physcians and midwives in transmitting said certificates of birth to the officer hereinafter designated; any physician, midwife or parent whose duty it may be to transmit such certificate as aforesaid, and who shall neglect or fail to perform such duty within the time above limited, shall be liable to a penalty of twenty dollars; and the assessor of any township who shall ascertain that any physician, midwife or parent has neglected or failed to perform such duty as aforesaid, within the time above limited, shall forthwith make and sign a certificate setting forth the particulars herein above specified and shall mark the same with the words "special return," but no such certificate of the assessor and no failure of any assessor, clerk or registrar of vital statistics to mail the envelopes aforesaid, shall release any physician or midwife, or any parent, from the duty of certifying such birth in the manner aforesaid nor from the penalty incurred by any neglect or failure to certify such birth."

From the foregoing it is seen that physicians and midwives who may professionally attend at any birth are required to prepare a certificate of the birth, on a blank furnished by the Bureau of Vital Statistics, through the local registrar, and transmit said certificate within thirty days to the said officer. When no professional attendant is present, then the parents shall prepare and transmit the certificate of birth. The law requires that the assessor, city clerk, or other person acting as registrar, shall annually supply each physician and midwife, on application therefor, with twelve stamped envelopes for use in transmitting certificates of birth.



### REPORT OF THE BOARD OF HEALTH.

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Registrars Must Make Prompt Returns.—The State Bureau of Vital Statistics is now issuing regular monthly bulletins showing the mortality records of the entire State, and it is essential that every death certificate which has been received by any local registrar, city clerk or assessor, shall be transmitted to Trenton on or before the fifteenth day of each month, as the law provides. This requirement of the law has been faithfully complied with in nearly all localities, and the delinquent registrars have each been notified that the penalty for delay will be imposed if future violations occur.

Table 50.—Births, Marriages and Deaths, by Counties, Cities, Boroughs and Townships, and Totals for the State, for the Year Ending December 31st, 1906, and Showing increase and Decrease from Previous Year.

#### ATLANTIC COUNTY.

·		BIRTH	3.	м	ARRIAG	es.	1	DEATHS	
	1906.	Variation.	tion 1905.	1906.	Varia from	tion 1905.	1906.	Varia from	ation 1905.
NAME OF PLACE.	Number in 1	Increase.	Decrease.	Number in 1	Increase.	Decrease.	Number in 1	Increase.	Decrease.
Absecon Absecon Absecon Atlantic City Buena Vista Brigantine Egg Harbor City Egg Harbor Folsom Borough Gailoway Hamilton Hammonton Linwood Longport Borough Mullica Northfield City Pleasantyille Port Republic City Somers Point South Atlantic City Ventnor Weymouth	1584 584 738 57 238 10 322 1111 8 1 9 655 37 22 112	2 57 15 13	5 15 4 6 1	7 5022 24 20 6 8 16 49 1 1 3	1 6 5 2	2 25 4	14 710 41 18 21 31 66 8 1 62 25 44 25 44	80 8 8 4 4 4 4 2 2 2 5	11 26 12 4
	1,018	97	40	670	80	43	1,033	121	66

<sup>\*</sup> Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

<sup>••</sup> The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

## BERGEN COUNTY.

	:	BIRTHS		м	ABRIAGI	cs.	1	EATHS	
NAME OF PLACE.	1906.	Varia from	tion 1905.	1906.	Varia from	tion 1905.	1906.	Varia from	tion 1905.
	Number in	Increase.	Decrease.	Number in	Increase.	Decrease.	4	Increase.	Decrease.
			Deci	Num	Incr		Number	Incr	
Allendale Alpine Borough Bergenfield Bogota Carlstadt Cliffside Park Closter Borough Cresskill Delford Demarest Borough Dumont East Rutherford Edgewater Englewood Cliv Englewood Cliv Englewood Cliffs Etna Fairview Fort Lee Franklin Garfield Glen Rock Hackensack City Harrington Harrington Park Borough, Hasbrouck Heights Haworth Borough Hillsdale Hohokus Leonia Little Ferry Lodi Borough Lodi Township Maywood Midland Midl	9299768361215 299768361215 237277 :944487220 1 : 199880 922214237219125 1 2 2 3 2 2 3 2 2 3 3 4 8 8 9 2 2 3 4 8 9 3 7 2 1 2 1 2 1 2 2 2 3 4 8 4 8 9 3 7 2 1 2 1 2 2 2 3 4 8 4 8 9 3 7 2 1 2 1 2 2 2 3 4 8 4 8 9 3 7 2 1 2 1 2 2 2 3 4 8 4 8 9 3 7 2 1 2 2 3 4 8 4 8 9 3 7 2 1 2 1 2 2 3 4 8 4 8 9 3 7 2 1 2 1 2 2 3 4 8 4 8 9 3 7 2 1 2 1 2 2 3 4 8 4 8 9 3 7 2 1 2 1 2 1 2 2 3 4 8 4 8 9 3 7 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	1	3 1 6 13 6 13 1 1 2	15 26 177 153 34 121 154 34 45 166 168 115 176 172 45 187 1176 172 45 187 1176 172 45 187 187 187 187 187 187 187 187 187 187	2 · · · · · · · · · · · · · · · · · · ·	13 2 2 2 13 4 1 1 2 7	6 44 100 408 100 144 133 461 141 48 155 100 1933 100 1933	22 33 88 23 11 33 38 38 34 44 43 43 43 43 43 43 44 44 44 44 44	10
Saddle River Borough Saddle River Township Teaneck Tenafly	6 62 15 42	33 7 10		6 4 1 6	3	1 4	8 43 11	7 15 1 6	
Union Upper Saddle River Boro. Wallington Washington	$egin{array}{c} 4ar{2} \ 1 \ \cdots \ 6 \end{array}$	18 1	i	9	5	i i	22 37 1	, ř	
Westwood	26 7 17	12 	 5 4	10		1 1 3	15 10 9	<u>5</u>	
· · · · · / ·	2,080	398	79	I	<b> </b>		<b></b>		

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#### BURLINGTON COUNTY.

		IRTHS.			ARRIAGE	ra	T	EATHS.	
. NAME OF PLACE.	1906.	Varia from	tion	1906.	Varia from	tion	1906.	Varia from	tion
	Number in	Increase.	Decrease.	Number in	Increase.	Decrease.	Number in	Increase.	Decrease.
Bass River Beverly City Beverly Township Beverly Township Bordentown City Bordentown Township Burlington City Burlington Township Chester Chester Chesterfield Cinnaminson Delran Eastampton Evesham Fieldsboro Florence Lumberton Mansfield Medford Mount Laurel North Hanover Township, Palmyra Pemberton Borough Pemberton Borough Riverside Riverside Riverside Riverside Riverside Riverside Springfield Tabernacle Washington Westampton Woodland	7 30 22 60 60 117 2 106 20 199 244 6 20 199 111 26 30 15 15 5 34 4 97 7 7 8 8 2 10 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 43 11 10 5 1  7  4 4 4 4 4  22  5	4 4 4 4 4 11 1 6 6 2 2 4 3 5 4 4 1 1 2 6 6 7 7 3 6 1 1 3 1 100	55 188 100 522 55 155 189 155 155 155 155 155 155 155 155 155 15	8 2	35 55 10 10 10 10 10 10 10 10 10 10 10 10 10	1 599 222 700 146 127 729 133 133 133 126 448 222 137 77 77 77 77 77 78 44 15 77 77 78 44 15 77 77 78 44 15 77 77 78 44 15 77 77 78 44 15 77 77 78 15 15 15 15 15 15 15 15 15 15 15 15 15	16 12 13 15 15 30 77 77 21 30 10 11 12 22 33 34 35	9 1 1 4 9 10 22 14
	914	164	100	411	61	88	964	152	83

#### CAMDEN COUNTY.

		BIRTHS	J.	м	ARRIAGI	ES.	1	DEAT'HS	l.
	1906.	Varia from	tion 1905.	1906.	Varia from		1906.	Varia from	
NAME OF PLACE.	Number in 16	Increase.	Decrease.	Number in 18	Increase.	<b>Decrease.</b>	Number in 16	Increase.	Decrease.
Audubon Borough Camden City Centre Chesilhurst Clementoh Collingswood Delaware Gloucester City Gloucester Township Haddon Haddon Heights Borough Merchantville Borough Oaklyn Borough Pensauken Voorhees Waterford Winslow Wood Lynne Borough.	4 1,658 6 48 26 24 192 43 16 45 20 24 16 55 55 6	133 88 31 767 67 6 110 22 11	20 8 8	2,831 11 10 28 13 5 30 6 33 4 8 12 2 10 2	1 369 6 5 4 4 6 4 7 135 2	1 4 8	31,565 42,42,431 28,153 153 85,18,22,44 46,111 42,33,44	218 3 6 5 3 7	6 2 5 8 11 11
	2,316	273	66	3,126	435	14	2,144	258	34

<sup>•</sup> Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

#### CAPE MAY COUNTY.

		BIRTHS		Ж	ARRIAGI	ES.	1	EATHS	•
NAME OF PLACE.	1906.	Varia from		Variation from 1905.		1906.	Varia from		
NAME OF PLACE.	Number in	Increase.	Decrease.	Number in	Increase.	<b>Decrease.</b>	Number in	Increase.	Decrease.
Anglesea Borough Avalon **Cape May City Cape May Point Dennis Holly Beach Borough Lower Middle Ocean City Sea Isle City Upper West Cape May Wildwood Woodbine	8 1 36 24 32 27 29 35 6 16 10 23 65	11 22 29 3 222 7	3 1  21 6	3 	3 4 6 9	10 11 11 11	17 2 42 22 17 19 37 29 6 21 8 9	15 11 14 4 	. 1 4 7
	312	59	34	*4 128	32	27	236	61	24

<sup>•</sup> Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

#### CUMBERLAND COUNTY.

	:	BIRTHS	.	MA	ARRIAG	es.	1	DEATHS	
	1906.	Varia from		1906.	Varia from		1906.	Varia from	
NAME OF PLACE.	Number in 1	Increase.	Decrease.	Number in 1	Increase.	<b>Decrease.</b>	Number in 1	Increase.	Decrease.
Bridgeton Commercial Deerfield Downe Fairfield Greenwich Hopewell Landis Lawrence Maurice River Millville City Stow Creek Vineland	223 36 82 11 27 19 3 91 29 7 281 14	29 16 24 4 2	13 10 11 18 38 4	118 17 17 17 18 6  15 13 105	3 1 3	10 2 2 10 2	195 25 27 12 14 12 64 15 12 166 9	33 55 	10 2 2 32 31 11 14
	927	85	94	408	14	26	670	31	86

<sup>\*\*</sup> The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

## ESSEX COUNTY.

	1	BIRTHS		M.	ARRIAG	es.	1	EATHS	ı.
NAME OF BLACE	1906.	Varia from	ation 1905.	1906.		ation 1905.	1906.	Variation.	
NAME OF PLACE.	Number in 1	Increase.	Decrease.	Number in 1	Increase.	Decrease.	Number in 1	Increase.	Decrease.
Belleville Bloomfield City Caldwell Borough Caldwell Borough Caldwell Township East Orange City Essex Fells Glen Bidge Irvingston Livingston Milburn Montclair City Newark City Newark City North Caldwell Borough, Nutley Borough Orange City South Orange Borough South Orange Township, Valisburg Verona West Caldwell Borough. West Caldwell Borough.	146 211 26 489 35 215 19 7,829 7,829 369 811 92 266 178	30 8 7 13 1 33 872 2 6 68 12 7	3 8 4 7	33 67 13 3 183 1 10 0 37 8 122 140 3,382  35 190 28 4  50	9 3 3 11 24 6 6 3 2 253 17 6 1 8	55	117 170 32 269 4 266 101 18 355 261 5,547 6 44 539 45 21 	77 377 55 2 77 111 2 5	3 34 2 4 13 4 21
	10,606	1,270	50	4,205	336	27	7,375	682	92

## GLOUCESTER COUNTY,

	1	BIRTHS	١.	м.	ARRIAG	es.	,	DEATHS	l <b>.</b>
NAME OF PLACE.	1906.		ation 1905.	1906.	Varia from	ation 1905.	1906.	Varia from	tion 1905.
NAME OF PLACE.	Number in	Increase.	Decrease.	Number in 1	Increase.	Decrease.	Number in 1	Increase.	Decrease.
Clayton Deptford East Greenwich Elk Franklin Glassboro Greenwich Harrison Logan Mantua Monroe National Park Borough Paulsboro Borough Pitman Grove Borough Swedesboro Washington Wenonah West Deptford Woodbury Woolwich	33 299 25 12 45 65 17 21 24 19 9 9 26 27 21 27 1 51 9 26 17	2 2 2 3 3 3 3 4 4 1 4 1 3 3 4 5 6 6	14 9 	5 11 15 13 29 4 4 4 2 2 10 14 11 13 2 2 13 3 2 13 3 13 4 4 4 4 4 2 14 14 15 15 15 15 15 15 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	9 1 11 11 12 3 3 2	2 2 3 8 20 3 3	28 30 31 11 24 35 14 14 13 35 27 14 29 16 8 8 16 8 16 8 16 8 8	14 3 5 2 2 2 3 26	1 1 3 6 10 13 13
	530	34	101	213	40	70	463	71	47

### HUDSON COUNTY.

		BIRTHS	ı.	м	ARRIAG	ES.	]	DEATHS.		
	1906.	Varia from	ation 1905.	1906.	Varia from	ition 1905.	1906.		ation 1905.	
NAME OF PLACE.	Number in 19	Increase.	Decrease.	Number in 1	Increase.	Decrease.	Number in 19	Increase.	Decrease.	
Bayonne East Newark Guttenburg Harrison Hoboken Jersey City Kearny North Bergen Secaucus Town of Union Weehawken West Hoboken West New York	1,650 29 172 272 1,719 4,408 261 343 38 495 143 715 218	326 2 33 64  109  86	95 64 21 1 6 12	344 3 12 117 911 2,165 74 57 231 280 95	9 25 6 48 64	52 5 17  114  6 1 1 5	759 36 57 233 1,431 4,607 248 173 173 287 130 385 104	93 49 213 14 2 67	12 10 9  54 	
	10,463	663	199	4,310	152	201	8,623	470	125	

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#### HUNTERDON COUNTY.

		BIRTHS	١.	M	ARRIAG	E8.	1	DEATHS	٠.
NAME OF PLACE.	1906.	Varia from		1906.	Varia from	ation 1905.	1906.	Varia from	
NAME OF THE	Number in	Increase.	Decrease.	Number in	Increase.	Decrease.	Number in	Increase.	<b>Decrease.</b>
Alexandria Bethlehem Bethlehem Bloomsbury Borough Clinton Borough Clinton Township Delaware East Amwell Franklin Frenchtown High Bridge Holland Junction Kingwood Lambertville Lebanon Raritan Beadington Stockton Tewksbury Union West Amwell	7 10 4 3 22 19 7 16 6 31 11 11 19 24 109 36 28 13 36 13	7 5 16 4 3	1 4 9 9 3 5 6 6 4 1 4 1 3 8 8 1 4 1 1 1 3 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 11 18 11 8 10 6 11 6 6 227 14 226 11 3 15 4	2 4 6 6 1 8 5 4 3 1 2 3 3	4 3 4 4 20	18 15 13 13 19 14 13 22 80 27 55 36 13 21 13	5 7 3 3 11 11 8 22 200 5 5 5 5 7	10 3 10 3 13
	434	44	71	*2 198	39	41	483	100	50

<sup>\*</sup> Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

### MERCER COUNTY.

		BIRTHS	s	м	ARRIAG	es. ·		DEATHS	<b>.</b>
V.V. OR D. A.	1906.	Varia from		1906.	Varia from		1906.	Varia from	
NAME OF PLACE.	Number in 1	Increase.	Decrease.	Number in 1	Increase.	<b>Decrease.</b>	Number in 1	Increase.	Decrease.
East Windsor Ewing Hamilton Hightstown Hopewell Borough Hopewell Township Lawrence Pennington Borough Princeton Borough Princeton Township Trenton Washington West Windsor	13 14 37 33 24 31 27 78 6 1,150	3 10 3 13 3 2 2	3 24	11 26 17 15 5 6 49 954	3 3 19	16 7 2 1 3	10 8 72 43 13 31 20 10 88 9 1,493 12	3 8 11 16	22
	1,481	288	42	*2 1,100		84	1,820	93	12

<sup>\*</sup> Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

#### MIDDLESEX COUNTY.

		BIRTH	<b>.</b>	M	ARRIAG	es.	,	DEATHS	3.
	1906.	Varia from	tion 1905.	1906.	Varia from		1906.	Vari from	ation 1905.
NAME OF PLACE.	Number in 1	Increase.	Decrease.	Number in 1	Increase.	Decrease.	Number in 1	Increase,	Decrease.
Cranbury Dunellen East Brunswick Helmetts Highland Park Borough Jamesburg Madison Metuchen Militown Monroe New Brunswick North Brunswick Perth Amboy Piscataway Raritan Roosevelt Borough Sayreville South Amboy South Brunswick South Brunswick South Brunswick South Brunswick South Hyer Woodbridge	16 21 33 6 28 29 15 15 299 5 346 29 46 29 187 50 26 107 83	25 5 15 9 6 43 24 48	8 14 9  9 4  52 6  25  29 9	88 88 72 55 18 16 11 309 2 419 6 12 15 86 87	21	1 1 3 1 3 1 1 57 2	26 19 32 1 13 5 10 22 11 4 22 3 355 48 48 52 137 86 6 123	18 8 8  4  39 18  12 29	12 12 15 16
	1,877	195	180	1,005	217	80	1,447	183	122

#### MONMOUTH COUNTY.

Allenhurst Allentown Asbury Park Atlantic Atlantic Highlands Avon Belmar Bradley Beach Borough Deal Eatontown Englishtown Farmingdale Freehold Highlands Borough Holmdel Howell **Long Branch Homell Howell Howell **Long Branch Manasquan Manasquan Marlboro Matawan Borough Matawan Township Midletown Millstone Monmouth Beach Boro Neptune Township North Spring Lake Ocean Raritan							
Allenhurst Allentown Asbury Park Atlantic Atlantic Highlands Avon Belmar Bradley Beach Borough Deal Eatontown Englishtown Farmingdale Freehold Highlands Borough Holmdel Howell **Long Branch Manalapan Manasquan Manasquan Marlboro Matawan Borough Matawan Township Millstone Mommouth Beach Boro Neptune City Borough North Spring Lake Ocean Barlan	BIRTHS.		MARBIAGES.		DEATHS.		
Allenhurst Allentown Asbury Park Atlantic Atlantic Highlands Avon Belmar Bradley Beach Borough Deal Eatontown Englishtown Farmingdale Freehold Highlands Borough Holmdel Howell **Long Branch Manalapan Manasquan Manasquan Marlboro Matawan Borough Matawan Township Middletown Millstone Mommouth Beach Boro Neptune City Borough North Spring Lake Ocean Barltan	90 Varia from		Variation from 1905.	1906.	Variation from 1905.		
Allentown Asbury Park Atlantic Atlantic: Atlantic Highlands Avon Belmar Bradley Beach Borough Deal Eatontown Farmingdale Freehold Highlands Borough Holmdel Howell **Long Branch Manalapan Manasquan Manasquan Marlboro Matawan Borough Matawan Township Millstone Mommouth Beach Boro Neptune City Borough North Spring Lake Ocean Barltan	Number in 18	Decrease.	Increase.	Number in 18	Increase.	Decrease.	
Sea Bright Shrewsbury Spring Lake Borough Upper Freehold Wall	2	8	40 3 6 41 1 2 6 2 2 2 1 2 2 3 5 9 22 3 5 9 1 8 3 4 1 1 2 3 4 1 1 2 3 4 1 1 3 4 1 1 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1	10 131 16 28 7 26 13	63 20 55 1 4 2 2 7	1 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	

<sup>\*</sup> Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

<sup>\*\*</sup> The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

## MORRIS COUNTY.

NAME OF PLACE.   State   Sta		вівтня.		marriages.			DEATHS.			
H	NAME OF PLACE.	906.			906.			906	Variation from 1905.	
Boonton Township		Ħ	Increase.	Decrease.	ä	Increase.	Decrease.	ä	Increase.	Decrease.
	Boonton Township Butler Chatham Borough Chatham Township Chester Dover City Florham Park Borough Hanover Jefferson Mendham Montville Morris Township Mourt Arlington Mount Olive Netcong Passaic Pequannock Randolph Rockaway Borough Rockaway Borough Rockaway Township Roxbury Washington	1 1 489 44 489 44 489 491 491 491 491 491 491 491 491 491 49	111 2 31 31 51 8 8 15 23 15 6	2 5 5 2 17 6	14 9 22 16 77 86 83 6 80 21 12 10 6 16 77 155 12	100	111 	10 1 2 2 1 2 2 2 2 2 4 4 2 2 2 2 4 4 2 2 2 4 4 2 2 2 4 4 2 2 4 4 2 2 4 4 2 2 4 4 2 2 4 4 2 2 4 4 2 2 4 4 2 2 4 4 2 2 4 4 2 2 4 4 2 2 4 4 4 2 4 4 2 4 4 4 2 4	32 9 27 1 12 4 4 20	1 1 1 7 27 11 1 1 1 1 1 1 1 1 1 1 1 1 1

## OCEAN COUNTY.

		BIRTHS	•	м	ARRIAG	es.	1	EATHS.	
NAME OF PLACE.	1906.	Variation from 1905.		1906.	Varia from	tion 1905.	1906.	Variation from 1905.	
· ·	Number in	Increase.	Number in	Increase.	<b>Decrease.</b>	Number in	Increase.	Decrease.	
Barnegat City Bay Head Beach Haven Berkeley Brick Dover Eagleswood Island Heights Jackson Lacey Lakewood Lavalette Little Egg Harbor Long Beach Manchester Ocean Plumstead Point Pleasant Beach Sea Side Park Borough Stafford Tuckerton Union	5 11 15 31 26 6 66 68 	5 (	3 3 5 1 9 6	32 10 16 91 44 41 2 11 14 77	19 11 16	34 43 35 31 1	21 6 10 32 31 9 22 22 10 10 11 10 77 7	1 17 17 6 4 2 1 10 9	22 4 4 5 8
	249	41	67	*2 147	41	26	<b>26</b> 5	58	40

<sup>\*</sup> Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

## PASSAIC COUNTY.

									==
	1	BIRTHS.			RRIAGI	ss.	1	DEATHS	ı.
NAME OF PLACE.	1906.	Variation from 1905.		1906.		Variation from 1905.		Variation from 1905.	
	Number in 1	Increase.	Decrease.	Number in 1	Increase.	Decrease.	Number in 1906.	Increase.	Decrease.
Acquackanonk Hawthorne Little Falls Manchester North Haledon Passaic City Paterson Pompton Pompton Lakes Borough. Prospect Park Borough. Totowa Wayne West Milford	131 33 22 31 1,526 2,026 57 21 10 8 16 40	191 5	22 4 4 243 1	27 4 15 12 934 993 34 8 8 12	10 3 2 50 5 2 1 1	110	83 26 50 27 5 653 1,992 32 7 16 9 26	18 10 10 151 13 7	2 88 5 13
	3,922	240	286	2,050	74	117	2,943	198	62

#### SALEM COUNTY.

	BIRTHS.			MARRIAGES.			DEATHS.		
NAME OF PLACE.	906.	Variation from 1905.		1906.	Variation from 1905.		1906.	Variation from 1905.	
	Number in 18	Increase.	<b>Decrease.</b>	Number in 18	Increase.	Decrease.	Number in 18	Increase.	Decrease.
Alloway Elmer Borough Elsinboro Lower Alloways Creek Lower Penns Neck Mannington Oldmans Penns Grove Borough Pilesgrove Pittsgrove Quinton Salem City Upper Penns Neck Upper Pettsgrove Woodstown	25 22 4 19 16 146 43 29 38 16 90 13	16 97	2 1 8 2 10 4 7	3 14  15 11 10 15 4 9 3 73 73  14	3 3 8  1 18  10 12	3 16 5 5	14 15 20 11 20 33 35 20 81 19 11 111 4 25	34 4 11 14	7 2 1 7 15
	381	33	36	215	55	33	349	38	56

## SOMERSET COUNTY.

	BIRTHS.			M.	ARRIAGE	s.	DEATHS.		
NAME OF PLACE.	1906.	Variation from 1905.		1906.	Variation from 1905.		1906.	Variation from 1905.	
	Number in 1	Increase.	Decrease.	Number in 1	Increase.	Decrease.	Number in 1	Increase.	<b>Decrease.</b>
Bedminster Bernards Bound Brook Borough Branchburg Bridgewater Franklin Hillsborough Millstone Montgomery North Plainfield City North Plainfield Township Raritan Rocky Hill Somerville Warren	28 50 85 13 27 37 20 1 14 83 10 58 9 91	10 48 6 15 8 4 1 4 6 27 1 47	43	11 31 43 5 4 20 10 2 11 26 4 18 8 4 41 4	13 22 23 13 13	1 7 15	21 42 53 10 18 329 5 17 555 13 586 17	2 6 3	14 2 13 4 4 8 42 12
	539	180	60	234	33	24	464	19	95

## SUSSEX COUNTY.

		BIRTHS.			ARRIAGÍ	ss.	1	EATHS	
NAME OF PLACE	1906.	Variation from 1905.		1906.	Varia from		1906.	Variation from 1905.	
NAME OF PLACE.	Number in 1	Increase.	Decrease.	Number in 1	Increase.	Decrease.	Number in 1	Increase.	Decrease.
	Nun		Dec	Nun	Inci	Deci	Nan	Incr	
Andover Borough Andover Township Branchville Brooklyn Byram Frankford Fredon Green Hampton Hardyston Hopatcong Lafayette Montague Newton Sandyston Sparta Stanhope Borough Stillwater Sussex Borough Vernon Walpack Wantage	11 2 13 13 13 13 13 13 13 140 10 10 11 11 11 128 16 16 16 16 16 16 16 16 16 16 16 16 16	2 2 7 10 8 8 8 15	3 1 18 18 10	6 1 4 4 2 1 1 2 2 2 8 5 4 4 1 0 6 2 1 3 5	2 9 7	1 3 2 2 7 1 1 6 11 2 2 5	55 122 66 14 22 46 68 28 10 477 26 14 116 23 28	19 27 4 33 31 44 12	4
	298	73	44	145	23	60	320	78	10

## UNION COUNTY.

	BIRTHS.			M	ARRIAG	ES.	DEATHS.		
	1906.	Variation from 1905.		1906.	Varia from	ation 1905.	1906.	Variation from 1905.	
NAME OF PLACE.	Number in	Increase.	Decrease.	Number in 1	Increase.	Decrease.	Number in 1	Increase.	<b>Decrease.</b>
Clark Cranford Elizabeth Fanwood Borough Fanwood Township Garwood Borough Linden Borough Linden Township Mountainside New Providence Borough, New Providence Township Plainfield Rahway Roselle Borough Roselle Park Springfield Summit City Union Westfield	1 69 1,220 20 15 18 2 7 21 419 43 18 19 26 145 19 109	31 88 13 1 1 1  4 45 9 1 7 72	5 1 10 18	29 502 9 1 6 3 157 78 10 8 8 52 4 54	5 51 2 2 3 9 9 17 17 120	38 61 11	1 48 1,097 8 17 8 2 11 11 304 110 8 26 14 101 19	15  i7 i	6 1 4 4 6 6 11 12
	2,164	286	34	921	122	23	1,850	201	56

# WARREN COUNTY.

	:	BIRTHS	l <b>.</b>	м.	ARRIAG	ES.	1	DEATHS	l <b>.</b>	
more on the second	1906.	Variation from 1905.		1906.	Varia from		1906.		ariation om 1905.	
	Number in 1	Increase.	Decrease.	Number in 1	Increase.	<b>Decrease.</b>	Number in 1	Increase.	<b>Decrease.</b>	
Allamuchy Belvidere Blairstown Franklin Frelinghuysen Greenwich Hackettstown Hardwick Harmony Hope Independence Knowiton Lopatcong Mansfield Oxford Pahaquarry Phillipsburg Pohatcong Washington Borough Washington Township	10 23 13 21 7 9 37 5 30 14 14 28 7 6 5 5 111 47 7	1002 4366	1 8 8 3 2 2 4 4 14	15 8 7 4 8 16 17 8 5 11  220 70 48 1	2 4 5 3 3 4 30	22221	3 21 25 17 18 11 28 14 7 16 23 25 56 3 161 422 11	7 11 3 4 4 27	15 10 22 10 10 3 	
	510	34	66	456	65	23	540	69	59	

## SUMMARY.

	I	BIRTHS.			ABRIAG	es.	DEATHS.			
NAME OF PLACE.	1906.	Variation from 1905.		1906.	Variation.	ation 1905.	1906.	Varia from	ation 1905.	
NAME OF THREE.	Number in	Increase.	<b>Decrease.</b>	Number in	Increase.	Decrease.	Number in	Increase.	Decrease.	
Atlantic County Bergen County Burlington County Camden County Cape May County Cumberland County Gloucester County Hudson County Hunterdon County Mercer County Monmouth County Monmouth County Morris County Salem County Salem County Sussex County Sussex County Sussex County Union County Warren County	1,018 2,080 9,14 2,316 312 9,27 10,606 530 10,463 4,31 1,377 1,264 9,42 2,49 3,922 381 539 2,98 2,164 510	338 64 207 225  1,219  464  191 44 102 87  29 252	9 68 25 26 46 46 3	670 634 4111 3,126 408 4,205 213 4,310 1,000 1,005 638 366 147 2,050 215 234 456	40 52 	28 12 30 49 70 43	1,033 1,349 964 2,148 670 7,375 463 8,623 1,820 1,427 1,107 2,943 349 464 320 1,850 1,850	588 699 2244 388  585 24 345 50 8117 136  688 1455 10		
	42,677	3,197	209	21,580	1,277	269	35.670	2,002	196	

TABLE 51 - SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1906.

TABLE 51. -SHOWING NUMBER OF DEATHS IN NEW JERSET FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1906-(Continued).

28	16 28 19 5 2 15 115 1 1 3 12 1
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284

TABLE 51.-BHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1906-(Ontinued).

Nervous System   Neurolgia   Nervous System   Neurolgia   Nervous System   Neurolgia   N
8 2882 41 455857 44148851
L 2525 L 2 2525
110 110 110 110 110 110 110 110 110 110
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
4 05000 20000000000000000000000000000000
21-1-23-23-35-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
8 888 88888 7 8887
2 4 48 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
0 10 20 20 20 20 20 20 20 20 20 20 20 20 20
1.886.88
4 880 0 2
2 1-5025111 8 1-502514 8-10 1-10889
8 8 11 1 1 2 2 2 2 2 2 1 1 1 9 2 9 9 9 9 9
7 252 11 1 2 882 11 1 1 1 1 1 1 1 1 1 1 1 1
78082 7111 7 8 88 8 8 7 111 7 18 1 1 1 1 1 1
2 88 2 L L 24 L 8 4 10 L 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2   1288   1   1   1   1   1   1   1   1   1
2 10082223 1010 10802550 4448 1114838
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

TABLE 51.-SHOWING NUMBER OF DEATHS IN NEW JERSET FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1906—(Continued).

-curror	121 22 28 28 28 28 28 28 28 28 28 28 28 28
Totals.	
Warren.	<u> </u>
Union.	2
Sussex.	(a) :001 11 100 1001 1001 1001 1001 1001 1
Somerset.	ω 40 4
Salem,	2 1 1 1 1 1 1 1 1 1 1 2 1 1 2 2 2 2 2 2
Passaic.	4 32-1 22 484 1-28 1 1-4
Осевп.	
Morrie.	α 12 α 22 114 1 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Monmouth.	1 1 1 2 1 1 8 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Middlesex.	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Mercer.	0 01 7-174 528 225 1 2 1
Hunterdon.	1 40 2 10 10 8
Hudson.	2 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Gloucester.	2 4 4 80 21 11 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Essex,	6 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Cumberland.	84 898 64 LA
Cape May.	1 18 2 2 1
Camden.	4 82 18 23 022 10 1 2 1 2
Burlington.	71 2211 2211
Вегgеп.	4 41 7270 8888 7 1
Atlantic.	8 2 2 2 2 8 9 8 9 9 9 9 9 9 9 9
	88 88 88 88 88 88 88 88 88 88 88 88 88
	Dysentery Dysentery Directinal Paresities Directinal Paresities Dheenses of Anus Freed Fichildus. Acute Yellow Arophy of the Liver. By death Tunor of the Liver. By death Tunor of the Liver. Billiary Calcult of the Liver. Diseases of the Elver. Diseases of Digestive System (Cancer and Tuberculosis excepted) Dysenses of Digestive System (Cancer and Appendicties excepted) Dysenses of Digestive System (Cancer and Appendicties excepted) Dysenses of Digestive System (Cancer and Appendicties of Digestive System (Cancer and Diseases of the Ridneys and Adnexa. Diseases of the Ridneys and Adnexa. Diseases of the Presticulary Males. Diseases of the Presticulary Diseases of the Perantocial Diseases of the Disease of Disease o

TABLE 51 .-- SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1906—(Continued).

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.пэтгаW		Ш	24 53 44 60 00
Union	H4 00100 H0011 H10.11	Ш	821 158 178
'xəssng			100
Somerset.	n n n n	ΪĪ	H40 0
Salem.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		18 20 10
Passaic.	.0 54 E 0 110	F	216 34 34 27
Осеап,	1 1 1	m	100
Morris,	HHH04 0 10 H	F	140 8
Monmouth.	ल व व लिल्लिल न न	-	8 E83
Middlesex,	P 10 10 10 10 10 10 10 10 10 10 10 10 10	iii	8 7 88
Mercer,	0 H0 H0 H 10 H 10 M		STREE S
Hunterdon.	8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ηİ	184 181
Hudson.	Seer Ser 1 4 22-2		222 2
Gloucester,			127 A 10
Essex.	88 71 4 612 288 71 17 17 17 17 17 17 17 17 17 17 17 17		96 28
Cumberland.	HHHON H HHH HH H H H H	111	12 7 12 2
Cape May.			9 5
Сашдеп.	0 4644 14 8646 9 8	怡	8282
Burlington.	N N N N N N		:E988
Bergen.	1 :##0# : :0 : : :0# :# : : : : : : : : :		28188
	2 1 2 1 2 1 2	111	17.4 181
Atlantic,		35 BA	337 339 40 41
	11.99 [129]	-	
	Breast deleast	Other Diseases Arthritis	Other Diseases of the Organs of Locomotion

TABLE 51.-SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTES, FOR THE YEAR ENDING DECEMBER 31, 1906 - (Continued).

Totals.	812222222	1132 2522 2522 2522 2522 2522 2522 2522	342921-783	35670
Warren.	- 8 F F	12 14 14 14 14 14 14 14 14 14 14 14 14 14	1111111	540
Union	4 0000 - 61 - 11	동대 의원 4이의4	1288	1850
Sussex,	7 7 7	1 2 6 5 2 1	1111112	320 1850
Somerset.	нноння	41 8 2	11119	464
Salem.	1 1 1	401 10 1 14	H 10	349
Passaic.	2000000 H	440°	н мнф	2943
Осеап.	1117 (11111	1 0 H H H 1 100	1 1	265
Morris.		E4884 LL 3	910019	1107
Monmouth,	9 2 12 11	88 46 18848	H H H H H	1225 1107
Middlesex.	HESSHHEE	8 4 1	1 1 1 1 1 1 1 1 1	447
Mercer.	2 64 01	188 48 1 Head	SHEET HE	8201
Hunterdon.	H 8 HHH 104	77   1 7 1 1 2   1		483 1820 1447
Hudson.	221102401 H	22 72 1 23 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	48 121	
Gloucester.		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	463 8623
Essex,	So A X HOUSE IN	125 25 25 25 25 25 25 25 25 25 25 25 25 2	90 HOLE	
Cumberland		. 00 4 40H	HH   H0	670 7375
Cape May.		8 4 98H	4	988
Camden.	अ अक्षा अ	25 of sec.	60 4	2144
Burlington.	4 0,00	84 1 64	4	964
Bergen.	HOUSENH !	합의 여러 숙나다年	i i i i i i i i i i i i i i i i i i i	
Atlantic,	84 14 14	173 69	H 10140	1083 1349
1100	<b>AMOURHORHS</b>	45 A B B B B B B B B B B B B B B B B B B	559 559 559 559 559 559	-
	03			
	143	146 146 149 (ted)	9	
	lts.	except		
	Jonstrumer	Proprints Dislocations Other Accidental Injuries.  Other Accidental Injuries.  Surns by Fire.  Surns by Fire.  Surns by Fire.  Surns by Fore.  Surns by Corrosive Substances.  Instructor and Freezing Accidental Drowning.  Inhalation of Adults.  Inhalation of Noxious Gases (Suicide excepted Inhalation of Noxious Gases (Suicide excepted Other Accidental Polsoning.  Xahastion-Cachexia.  Clastic Disorder.	Fever. fred Diseases. tits.	Grand total
	By Poison	Sprains.  Other Accidental Injuries.  Other Accidental Injuries.  Burns by Fire.  Sunstroke and Freezing.  Verwork.  Inantition of Noxious Gases (Enthaltion of Noxious Gases (Enthaltion of Noxious Gases (Extraustion of Noxious Gases (Extraustion of Noxious Gases (Extraustion of Noxious Gases (Extraustion Caterback).	royer. (Inflammatory Fever ropsy. Cyanosis. Sabhyxia Cyanosis. Inden Death. Deband. Udominal Tumor. Ither Tumors. Inknown or Not Specified D.	total
	Suicide or Attempt at Suicide. Fractures	Dislocations Dislocations Dislocations Dislocations Burns by Fire. Burns by Fire. Burns by Corrosive Subsets Burns by Corrosive Subsets Burns by Corrosive Subsets Burns by Corrosive Subsets Core work Accidental Drowning. Inhaltation of Adults. Inhaltation of Noxious Gau Other Accidental Poisonit Other External Violence. Exhaustion-Cachexia.	Fever. (Inflammat Dropsy	Grand

TABLE 52,-SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INHABITANTS IN NEW JERSET FOR THE YEAR ENDING DECEMBER 31, 1906.

FAC- TORY EM- PLOYES.	Females.	10   10   10   10   10   10   10   10
	Malea.	
•	Expressmen	
	Engravers.	::::::::::::::::::::::::::::::::::::
	Engineera.	404 : : : 0 : : : : : : : : : : : : : :
-	Electriciana	H
	Dyers.	F
	Drugglsts.	H : : : : : H : : : : H : H : : : : : :
	<b>Drivers</b> , &с.	840 95 00 000 8 8 8 40 4 C 8 1 1 L 2
	Dressmakers	
	Dentista.	
	Coopers,	64
	COOKS.	P : : : : : : : : : : : : : : : : : : :
	policemen.	0H::::H: 0H:::H-0H:::H0H::04:H:
pu	Constables a	
	carpentera.	0001-0 : 18 : 02 t 4 8 2 15 8 10 t - 10 1 8 10 10 10 10 10 10 10 10 10 10 10 10 10
pus	Contractors	
	1010	<u> </u>
	Clerks.	li
	Clergymen.	4 :   HERE   HE   HE   HE   HE   HE   HE
.819	Civil engine	
	Cigarmakera	HH
	Chemists.	
129.	Buttonmake	
	Butchers.	H : : : : : : : : : : : : : : : : : : :
••	Brickmaken	
	WOTEETS.	
-110	Brass and ir	c1
	Вооккеереп	HHH H 188 HOU : 1 HOOHG : 1 1 100H : 1-4 1HH
	Boilermaker	
	Bostmen.	U
	Bartenders, Blacksmiths	00 : 10 : 4 : 100 - 11 : 11 : 12 : 11 : 12 : 11
	Barbers.	
	Bakera.	
	Bankers, &c	
	. stairtA	
	Architects.	
of cities.	Population	89644 12008 13624 13624 13624 13624 13624 13624 13626
	CITIES.	Atlantic City Bayonne. Bayonne. Bayonne. Bayonne. Bayonne. Bayonne. Bayonne. Bayonne. Bayonne. Buridgeton

TABLE 52.-SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INHABITANTS IN NEW JERSEY FOR THE YEAR ENDING

**DECEMBER 31, 1906—(Continued).** 

Millers. Milkmen. Merchants. Masons. Manufacturers. Managers, &c. Machinists. Locksmiths. Laborers. Housewives, Linemen. Letter carriers. Leatherworkers. Lawyers. Laundrymen. Laundresses. Janitors, &c.c. Icemen. Hotelkeepera Foundrymen ল Florists, &cc. 8 9 Fishermen. ፡ 11 Firemen Farmers. Rahway..... Harrison .... Ioboken Vewark Orange Passale City..... CITIES. North Plainfield..... Morristown..... Bridgeton..... New Brunswick Gloucester City cearny..... Camden City rvington.... East Orange Sordentown Dover ..... Jackensack Englewood ersey City ontclair Elizabeth.

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TABLE 52.—SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INHABITANTS IN NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1906—(Continued).

All other professions.	8 H
All other trades.	C1
Wireworkers,	
Wheelwrights.	
Wеауегв.	
Waiters.	1 1 2 2 1 4 6 6 135 8 1 1
Upholaterers.	
Undertakers.	
Tinsmiths.	8 1 1 81 1 1 1 14
Telegraphers.	2 2 2
Teachers,	00 HH
Tanners.	
Tailors,	
Stonecutters,	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Silkworkers,	
Shоетакетв.	19 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Salesmen.	84-10 or
Sailors,	
Rubberworkers.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Railroad employes,	ero com 전 : 5대 : 이부 (영니파니니티) 4 10 : 마니큐
Real estate and insurance.	8 401 1 8 91 1 91 1 41 10
Printers,	H     H
Potters,	
Porters, &c.	[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
Plumbers.	
Physicians,	& ! ! !4 ! ! ! ! !- ! ! ! ! ! ! ! !
Photographers.	[8] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
Paperhangers.	1119 111111111111 119 111112 1111
Painters.	क्ष वात व सळनमवाक्रमचळ्याचा मळळ्या कळळचमळ
Nurses,	MH M : M : MHHM   M   D : : :   HD : : M   M   1   H
Musicians.	NO 1-11 1-1 1-1 1-1 10 10 10 1-1 1-1 1-1 1
CITIES.	Agoune City  Sayoune Sayoune Tridgeton Tridget

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CITIES.				3ed Bank	Salem City	South Amboy	Domination of Training	TOWN OF URIOR	renton		West New York

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PABLE 52 SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF COUPATIONS OF DECEDENTS OF CITIES OF COUPATIONS OF DECEDENTS OF CITIES OF COUPATIONS OF DECEDENTS OF CITIES OF COUPATIONS OF DECEDENTS OF CITIES OF COUPATIONS OF CITIES		Milkmen.	8
PABLE 52.—BHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS OF D	EAB	Merchants.	
TABLE 52 SHOWING OCCUPATIONS OF DECEMBER 52 SHOWING OCCUPATIONS OF DECEMBER 52 SHOWING OCCUPATIONS OF DECEMBER 52 SHOWING OCCUPATIONS OF DECEMBER 52 SHOWING OCCUPATIONS OF DECEMBER 52 SHOWING OCCUPATIONS OF DECEMBER 53 SHOWING OCCUPATIONS OF DECEMBER 54 SHOWING OCCUPATIONS OCCUPATI	년. 된.	.snoasM	
PABLE 52 SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF COUPATIONS OF DECEDENTS OF COUPATIONS OF DECEDENTS OF CITIES OF COUPATIONS OF CITIES OF CITIES OF COUPATIONS OF CITIES	# ·	Manufacturers.	282
TABLE 52.—SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS OF OCCUPATIONS OCCUPATIONS OF OCCUPATIONS OF OCCUPATIONS OF OCCUPATIONS OCCUPATION	2	Мапаgers, &с.	H
TABLE 52. BHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INHABITANTS IN CITIES OF OVER 6,000 INHABITANTS IN CITIES OF OVER 5,000	SEY	Machinista.	
TABLE 52. BHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS OF OCCUPATIONS OCCUPATIONS OF OCCUPATIONS OF OCCUPATIONS OF OCCUPATIONS OF OCCUPATIONS OCCUP	JER	Locksmiths.	
TABLE 52.—BHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS OF OCCUPATIONS OF DECEDENTS OF OCCUPATIONS OF DECEDENTS OF OCCUPATIONS OCCUPATION		Laborera.	401 818 82 8
TABLE 52. BHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS OF OCCUPATIONS OF O	z Z	Housewives.	288 × 38 5 4 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4
TABLE 52. BHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INHABITARY  BE BANK  Red Bank  Red Bank  Be Be Be City  Be Be Be Be Be Be Be Be Be Be Be Be Be B	192 193	Linemen.	8
TABLE 52. BHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INFRABLE 52. BHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INFRABLE 52. BHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INFRABLE	LAN	Letter carriers.	5
TABLE 52. BHOWING OCCUPATIONS OF DECEMBER 5. BHOWER 5. BHOWING COUNTY CO	YBI.	Leatherworkers.	
TABLE 52.   SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS OF OCCUPATIONS OCCUPATIONS OF OCCUPATIONS OF OCCUPATIONS OF OCCUPATIONS OF OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUPATIONS OCCUP	ined (pon	Lawyers.	
TABLE 52.—SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER BEILD STATES OF OVER BEILD STATES OF COURTS OF OVER BEILD STATES OF COURTS OF CITIES.    Control	nti <del>n</del>	Laundrymen.	
TABLE 52. — SHOWING OCCUPATIONS OF DECEDENTS IN CTIES OF OVER  Red Bank Red Hoboken Red Hobok	\$ B	Laundresses	
TABLE 52.   SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS IN CITIES OF OCCUPATIONS OF DECEDENTS OF OCCUPATIONS OF DECEDENTS OF OCCUPATIONS OF OC	ae Ĭ		[ : : : : : : : : : : : : : : : : : : :
TABLE 52SHOWING OCCUPATIONS OF DECEDENTS IN CITIES	<b>E</b> . 82		<del>                            </del>
TABLE 52. BHOWING OCCUPATIONS OF DECEMBER 31,  Red Bank Salem City.  CITIES.  CITIES.  CITIES.  CITIES.  CITIES.  CITIES.  CITIES.  CITIES.  DECEMBER 31,  DECEMBER 31,  DECEMBER 31,  DECEMBER 31,  The Interport of Concern.  County Among City.  County Among City.  County Among City.  County City.  County City.  County City.  County City.  County City.  County City.  County City.  County City.  County City.  County City.  County City.  County City.  County City.  County City.  County City.  County City.  City County City.  City City City.  City City City.  City City City City.  City City City City.  City City City City.  City City City City City City City City	6. ₫	Теетеп.	<u>                                     </u>
TABLE 52.—SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF DECEDENTS OF DECEDENTS IN CITIES OF DECEDENTS OF DECEDENTS IN CITIES OF DECEDENTS OF DECEDENTS IN CITIES OF DECEDENTS OF	<u> </u>	Hotelkeepers	:::-~~~
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TABLE 52SHOWING OCCUPATIONS OF DECEDENTS IN GITE   Red Bank	22 22	Grocers.	::::NONH:
TABLE 52 SHOWING OCCUPATIONS OF DECEDENTS IN CT.  Red Bank Salem City County Amony County			
TABLE 52.	5 5		: 63 H : 63 : :
TABLE 52 SHOWING OCCUPATIONS OF DECEDENTS IN STABLE 52 SHOWING OCCUPATIONS OF DECEDENTS			:01 : : : : : : : : : : : : : : : : : :
TABLE 52SHOWING OCCUPATIONS OF DECEDENTS   PARTHERS   PARTHER	¤ ਬੁ∙ਾ		
TABLE 52 SHOWING OCCUPATIONS OF DECEDENT   CITIES.	<u>22</u> . A		<del>                                      </del>
TABLE 52.—SHOWING OCCUPATIONS OF DECEDED	Ż		<del>   </del>
TABLE 52.—SHOWING OCCUPATIONS OF DECE  Red Bank  Red Bank  Salem City  County Amboy  Tenton  West Hoboken  West Hoboken  West Hoboken  West Over York  2	ā	тисшен:	<del>                                      </del>
TABLE 92.—SHOWING OCCUPATIONS OF DE  Red Bank Salem City South Amboy Frem of Union			HOHH :0 :0
TABLE 92.—SHOWING OCCUPATIONS OF TABLE 92.—SHOWING OCCUPATIONS OF The control of the control of	2	Farmers.	
	TABLE 52.—SHOWING OCCUPATIONS OF 1	CITIES.	nik Jity Imboy 1 Union Oboken ew York

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END	All other professions.	
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£ .	Undertakers,	1 4 2
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<b>2</b>	Tanners.	
<b>2</b>	Tailors.	ц : : : : : : : : : : : : : : : : : : :
H	Stonecutters.	:::::::::::::::::::::::::::::::::::::::
∄ં≾ી	Silkworkers.	
E 3	Shoemakers.	:- ::000 ::
DECEMBER 31, 1906—(Continued)	Salesmen.	3 2 2 1
88	Sailors.	oo ; ; ; oo ; ;
ا څ کم	Rubberworkers.	
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6 6	nsurance. Railroad employes,	8-82
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5 2	Plumbers.	:::-:-
7 2 1	Physicians.	T :- : :- : :
	Photographers.	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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E 52,—SHOWING OCCU	CITIES	ank City Amboy  of Drion  of Drion Aloboken  New York
BLE 52.—SHOWING OCCU	CITIES.	Bank   Bank
TABLE 52.—SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INHABITANTS IN NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1906—(Continued).	CITIES	Red Bank Salem City. South Amboy. Summit, Amboy. Inch City City City City City City City City

TABLE 53.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY COUNTIES, EXCLUSIVE OF CITIES OF OVER 5,000 INHABIT-ANTS, FOR THE YEAR ENDING DECEMBER 31, 1906.

Estimated population  200 200 200 200 200 200 200 200 200 20		
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Estimated population  2,22,22,22,22,22,22,22,22,22,22,22,22,		
Estimated population  2,22,22,22,22,22,22,22,22,22,22,22,22,		<u> </u>
Estimated population  20, 20, 20, 20, 20, 20, 20, 20, 20, 20,		
\$22,22,22,22,22,22,22,22,22,22,22,22,22,		
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Second   S		
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### Second Secon		
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Estimated population of countries, exclusive of countries, exclusive of countries, exclusive of countries, exclusive of countries, exclusive of countries of coun		<u>81   </u>
Estimated population [Estimated population   12,232,232,232,232,232,232,232,232,232,2		
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<b>E</b>	counties, exclusive	E 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	COUNTIES.	Atlantic Bergen Bergen Sabergen

TABLE 53.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY COUNTIES, EXCLUSIVE OF CITIES OF OVER 5,000 INHABIT-ANTS, FOR THE YEAR ENDING DECEMBER 31, 1906—(Continued).

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TABLE 54.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEMBER

		Architects.	Artists.	Bakers.	Bankers and brokers.	Barbers.	Bartenders, brewers and saloon keepers.	Blacksmiths.	Boatmen.	Boiler makers.	Bookkeepers.	Brass and fron- workers.	Brickmakers.	Butchers.	Buttonmakers.	Chemists.	Civil engineers.	Cigarmakers.	Clergymen.	Clerks.	Cooks.	Coopers.
Consumption.	10 to 15. 15 to 20. 20 to 30. 30 to 40. 40 to 50. 50 to 60. 60 to 70. 70 to 80. 80 to 90. Over 90.	  1  1	2	 4 6	  1 1 	1 3 7 6 1 1 —	5 11 5	 5 4 4 3 1 			 6 10 4 2  	1 7 11 5 1 1 1 		 2 4 5 5 1 	.: 2 1 2 .: .: .: .:	1 2 1 	2 1 	1 2 4 8  1 	2 	3 4 1		 3 2 1 1 1 
Cancer.	10 to 15. 15 to 20. 20 to 30. 30 to 40. 40 to 50. 50 to 60. 60 to 70. 70 to 80. 80 to 90.	 1 1 	  1	  1	 2  1	1  1 	3 1	 1	 1 1 2 1	  2 1	  2	1 1 1 1	 	  1			  2	  1 1 2		116  2 2 6 1 11 1	•	
Tota	als	2	1	2	8	1	—	4	_ 5	- 3	2	<u>-</u> 6	-	1	<del>-</del>		2	4	3	23	5	
Suicide.	10 to 15			 • • • •	• • • • • •	1 1	2	1 1	 3 1 		 2 1 	2 		 2 2 				 1  1 1		4 5 3 8 1	   1	
Tota			_	1	_	<u></u>		1	-5		3		:-	 4	-		=	3	<u> </u>	17		<u></u>
Diseases of the nervous system and of the organs of sense.	10 to 15. 15 to 20. 20 to 30. 30 to 40. 40 to 50. 50 to 60. 60 to 70. 70 to 80. 80 to 90. Over 90.		 1	 1 4  2	 1 1 2 2	 5 1 1 	2 2 2 2 2 2	 1 1 4 4 2 3		1 1	 1  3 2	1 4		 1 1 4 4 2 1	 1	1 1	:: 1 1 1 ::		::	 7 8		1
Tota			1	12	6	8	10	15	18	3	6	7		13	1	2	4	4	15	27	5	1
Diseases of the circulatory system.	10 to 15. 15 to 20. 20 to 30. 30 to 40. 40 to 50. 50 to 60. 60 to 70. 70 to 80. 80 to 90.	   1		2 3 2 2 	 1 3 4 1	1 1 2 4 1 3 1	2 5 6 1	:: :2 2 2 6 5 ::	1 2 5 6 2 1	1	 3 1 2 3 1	2 4 3 1 3		 2 2 3 1	"i			 2 1 3 8	 1  2 3	 3 8 8 8 5 4 8	 3 2 1	 1
Tota	als	1	<del> </del>	9	<u></u>	 13	15	17	 17		10	13	-	 9	 1		-	9	6	39	6	 1

NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING  $31,\ 1906.$ 

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Constables and policemen.	Contractors, carp ters and builders.	Dressmakers and seamstresses.	Dentists.	Drivers, hostlers and teamsters.	Druggists.	Dyers.	Engineers.	Engravers.	Electricians.	Expressmen.	Males.	Females.	Farmers.	Firemen.	Fishermen.	Florists and gardeners.	Foundrymen and moulders.	Glassblowers.	Glassworkers.	Grinders and polishers.	Grocers.	Hatters.	Hotelkeepers, restau- rateurs and stewards.
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1 1 2 2	9 10 21 26 18 5			2 5 6 6 10 6 2 	1	1 1 2	3 4 2 3 4 1 	1 	2 2		1 1 2 1 1		35 77 28 28 52 24 2 144	1 1 3 3	1 1 1 4	1 3 5 7	2 3 1 	1 2 2	2	1	2 2 1 8 1 2 1	<u> </u>	1 1 2 1 2 1 

TABLE 54.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEMENTS IN DECEMBER 31,

		Housekeepers and housewives.	Icemen.	Janitors and watchmen.	Jewelers and watchmakers.	Laborers.	Laundresses.	Laundrymen.	Lawyers.	Leatherworkers.	Letter carriers,	Linemen.	Locksmiths.	Machinists,	Managers and superintendents.	Manufacturers.	Masons.	Merchants.	Milkmen.
Consumption,	10 to 15. 15 to 20. 20 to 30. 30 to 40. 40 to 50. 50 to 60. 60 to 70. 70 to 80. 80 to 90. Over 90.	2 36 260 265 150 76 60 21 5	1 2	2 3 1 3 1	2	17 106 115 95 45 18 13	i i 1	1	2 1	265	1 2 12	2	3	15 14 7 6 4 	2 4 1 4 2	1 1 1	10 11 3 1 1 	::36745 :::	`i
Tota	als	876	3	10	17	409	3	1	3	16	5	3	3	47	13	3	28	25	1
Cancer.	10 to 15. 15 to 20. 20 to 30. 30 to 40. 40 to 50. 50 to 60. 60 to 70. 70 to 80. 80 to 90. Over 90.	7 47 123 138 132 67 13		1 1 3 3 1	1	1 3 13 16 11 7 2	1		1	1	1	11111111		5 1 1 1 1	1	1	 1 6 1 1	1 2 4 5 4 1	```
Tot	als	529		- 6	1	53	3		1	1	1	-		5	1	1	9	17	1
Suicide.	{ 10 to 15. 15 to 20. 20 to 30. 30 to 40. 40 to 50. 50 to 60. 60 to 70. 70 to 80. 80 to 90. Over 90.	1 6 14 8 6 2 2		1	1 2 1	1 4 6 10 2 7 3			***		1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		***	1 3 1 1			1 2	1 2 2	
Tot	als	39		1	9	33			-		2	-		-6	-2	-	3	5	
Diseases of the nervous system and of the organs of sense.	10 to 15. 15 to 20. 20 to 30. 30 to 40. 40 to 50. 50 to 60. 60 to 70. 70 to 80. 80 to 90. Over 90.	19 65 109 169 225 201 70 10	1 	4 E	1 1 3	1 28 33 42 59 35 11	1 1 2 2 1		2 2 2 5 2 	1	1	111		3	2	1 24 24	9 2	7 11 17 10 4	1
	( 10 to 15									1			П	1			ľ		ľ
Diseases of the circulatory system.	15 to 20, 20 to 30, 30 to 40, 40 to 50, 50 to 60, 70 to 80, 80 to 90, Over 90	41 80 124 143 201 147 46	1	. (	1 2 3 3 3	40		1	70	3 3 3 1			100	4040	2		1 2 4 2 2 1		

NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 1906-(Continued).

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Millers.	Nurses.	Painters.	Paperhangers.	Photographers.	Physicians.	Plumbers.	Porters.	Potters.	Printers.	Railroad employes.	Real estate and insurance.	Rubberworkers.	Sailors.	Salesmen.	Shoemakers.	Silkworkers and silkweavers.	Stonecutters.	Tailors.	Tanners.	Teachers.	Telegraphers.	Tinsmiths.	Undertakers.	Upholsterers.	Waiters.	Weavers.	Wheelwrights.	Wireworkers.	All other occupations.	All other professions.	All other trades.
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1   1   2 1	 2 1 2 2 1 	 1 2 5 6 4 	1		1 4 1	1 1 1 2 1	1 1   2	1 1 2 2 	 1 1 1 1 1  5	3 6 6 6 3	1 1 1 6 6 8 3	 	ī	3 2 7 1 	1 2  8 10 2  23	1 3 1 1 3 8 8	2	1 1 1 3 4 2 1 		 1 1 2 		1 1 1 2 	 4 1 		 1 2 1  	 2  2  	  2  2		2 1 9 12 15 10 12 3 	3	

TABLE 54.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEMBER 31,

		Architects.	Artists.	Bakers.	Bankers and brokers.	ľ	Bartenders, brewers and saloonkeepers.	Blacksmiths.	Boatmen.	Boiler makers.	Bookkeepers.	Brass and iron- workers.	Brickmakers.	Butchers.	Buttonmakers.	Chemists.	Civil engineers.	Cigarmakers.	Clergymen.	Clerks.	Cooks.	Coopers
Diseases of the respiratory system. (Consumption and pneumonis excepted.)	10 to 15. 15 to 20. 20 to 30. 30 to 40. 40 to 50. 50 to 60. 60 to 70. 70 to 80. 80 to 90. Over 90.	1 1		1 1 1 1	1	1	1 2	11 1 1 4 2	 1 1 1 1  5		2 1	i		i i i i i i		- 2 - 2		1	11111	1	1	1 1
Diseases of the digestive system.	10 to 15	1  1 		2	1  2 	1 1 1  2	2 6 2 1		 1	1	 1  1	3 2		1  3  1	"i	1	 1	1 1 1	 1 1 	1 2 10 6 2 3 3 1	3 1 	1
Diseases of the genito-urhary system and adnexa.	{ 10 to 15. 15 to 20. 20 to 30. 30 to 40. 40 to 50. 50 to 60. 60 to 70. 70 to 80. 80 to 90. Over 90.			2 :1 1 2 1 2 :- 7	3 1 4 5	4 2 8 3 8	11 2 3 3 1 8 	5 2 4 3 3 2 1 15		1 2 1	2  2  2 	2 3 2		10  1  8 7 		1	1  1	2 214 7	2 1 2 1 2 1 7	28  7 5 6 7 5 1 	4 11151	1 i
Pheumonia.	10 to 15. 15 to 20. 20 to 80. 30 to 40. 40 to 50. 50 to 60. 60 to 70. 70 to 80. 80 to 90. Over 90.	1 1		 1  1 1	 1  8 1 1	 1 2 1 1 1	1 2 1 3 2	1 2 1 1 1	1 4 3		1 8 1 2	1 4 1 2		3 3 1 1			1	1	2	2 10 9 7 2 2	3 2 1 2	
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NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 1906-(Continued).

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Constables and policemen.	Contractors, carp   ters and builders.	Dressmakers and   seamstresses.	Dentists.	Drivers, hostlers and teamsters.	Druggists.	Dyers.	Engineers.	Engravers.	Electricians.	Expressmen.	Males.	Females.	Farmers.	Firemen.	Fishermen.	Florists and gardeners.	Foundrymen and moulders.	Glassblowers.	Glassworkers.	Grinders and polishers.	Grocers.	Hatters.	Hotelkeepers, restau- rateurs and stewards.
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6	58	8	 - <u></u> 2	 85	3	2	14	1	2	<u>; : : : : : : : : : : : : : : : : : : :</u>	8		75	 8	<u>-</u> 5	10	6	1		1	6	10	16
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TABLE 54.—8HOWING AGES AT DEATH AND OCCUPATIONS OF DECEMBER 31,

															_			_	-, =
io res. tem. tion tonis	10 to 15	Housekeepers and housewives.	Icemen.	Janitors and watchmen.	Jewelers and watchmakers.	Laborers.	Laundresses.	: :   Laundrymen.	L: : :   Lawyers.	: : Leatherworkers.	: : Letter carriers.	: : Linemen.	Locksmiths.	Managers and	: :   Manufacturers.	: : Masons.		: :   Milkmen.	1:   Miners.
Diseases of the respiratory system. (Consumption and pneumonia excepted.)	40 to 50	19 33 51 54 20 2		1 1 	1 1	3 14 21 4 4	1		1 1	2				3	-	1	1 2 2 5 4 3 		
Diseases of the digestive system.	10 to 15	66 34 55 45 42 35 24 9		2 3 2 4	1 2	1 8 5 10 12 14 8 3		" " " " " "		3 2	2			2	1 1 1	   		 1 1	
Totals	J	250		11	4	63		1		7	2	- -	- -	6	3	3	14	2	
Discases of the genito-urinary system and adnexa.	10 to 15	14 159 179 123 134 114 70 29	1	1 1 2 1 6 3	2 2 2	3 12 22 39 40 47 25 8	1 2		1	1 1 2 2		1	:  !	1 6 2 4 2 4 2 4 2 4 4 2 4 4 2 4 4 4 4 4 4	1 1 3 2 2 2 1	.: .: 2 2 5 5 8 :: :	; ; 4 4 10 10 5 ;	 1	······································
Totals	·	823	1	15	6	196	3		2	6		1.	1	7 1	9	22	85	1	2
Pneumonia.	10 to 15	6 42 62 52 76 72 64 20	3	1 3 4 2	1	37 47 32 38 42 10 4	1		i .	3 1 2 1		1	٠. ا	2 2 2 5 5 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	 1 2 4 1 	.: 2544433	i i	  1 1 1
Totals		398	4	10	2	214	1	-	1	8	-	1	. 1	11	6	<u> </u>	25	1	3
All ot	hers	564	1	14	12	585	<u></u>	2	5 1	اوا	3 1	11	1 3	3 17	10	31	33	2	19

NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 1906—(Continued).

1 I Millers.	S   : L: : L: : :   Musicians.	1 1 Nurses.	9 1 Painters.	L   : : : : : : :   Paperhangers.	:   ; ; ; ; ; ;   Photographers.	5   : : : : : :   Physicians.	F   : : : : 1 : :   Plumbers.	T 1 Porters.	P   : : : : : 8: : 1:   Potters.	8   : : -: : :: :   Printers.	Railroad employes.	Real estate and insurance.		1 1 Sallors.	1 : 1 : 1 : 2 : 1 : 2 : 1 : 2 : 1 4	s   :: 5: 1: ::   Shoemakers.	1   Silkworkers and   silkweavers.	5   11   Stonecutters.	   3	Tanners.	5   : : : : : :   Teachers.	r ;;;;;;;; Telegraphers.	:   : : : : : : :   Tinsmiths.	8   : : : 1 1 : : 1 Undertakers.	1   : : 1 : : : : :   Upholsterers.	s   : : : 1 : :   Waiters.	T Weavers.	b   : : 1 1 : : : :   Wheelwrights.	L   : : : : : : : :   Wireworkers.	Z All other occupations.	All other professions.	All other trades.
	 1 1    2	 1   2	2 1 2 3 8	 1  1		 1  2 1  	 1 1 2   		 1   1	 1 1   2	1 1 1	1 1 1	 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	 1 1	 1 8 1 1  7	 2  1 2  5	1	1	 1 1  2			 1  1	 1   1	  1 		 3 1   5	1			2 2 1 5 6 2	1 	
::: ::: ::: ::: ::: 1	1  2  3	 1 1 1 	19	 1  1  2	1 1 1 	 1 5 4 1 1 8 	1	1	1 3	 1 5 1  8	3 6 3 2 1	1 2 1 2 5 		21	1 1 3 2 7 1 2 1 		11		1 1 4 2 1		1 1 1 1 	1  1  1 	:::12 :::::::::::::::::::::::::3	   1	:::1:::1:::::1:2	1 2 1  2  6	2 2 7	   1	 •1  1	2 5 10 8 14 9 5 1		1
 1  1  2	3 9	l		   2	4	1 1 2 1 2  1 2 	6		21	3 1 2 3 1 	1 4 4 1 1 1 11 122	2 3 1 	 	13	1 5 1 2 	9	1 2 1 1 5	1 5	2 2  4	1	1 1 1 1 1 1 1 1 6		1 1 2 9	1		1  1 1  8 7	 1  1  2	    2		1 7 7 3 7 5 5 5	1 2 8	1 1 2 1

TABLE 55.—SHOWING NUMBER OF DEATHS FROM BRIGHT'S DISEASE IN NEW JERSEY, IN COUNTIES, EXCLUSIVE OF CITIES, AND IN CITIES OF OVER 5,000 INHABITANTS, FOR SEVEN YEARS.

NAMES	1	DEAT	HS FROM	4 BRIGH	T'S DISE	ASE.	
OF COUNTIES AND CITIES.	1900.	1901.	1902.	1903.	1904.	1905.	1906
tlantic County	17	13	14	15	21	25	2
Atlantic City	28	36	32	34	. 38	60	9
ergen County Englewood	27 5	25	22 5	31 7	47 5	36 7	•
Hackensack	11	8	3	8	8	16	1
Bordentown	. 25	40	. 28	39	. 47	46	
Bordentown	····ió		····ió	iż	. 10	12	
Burlington	13	12	17	29	. 10 20	27	
Camden	99	64	87	84	106	113	1:
Gloucester City	3	2 2	5	11	16	6 11	. :
umberland County	. 13	15	16	$\begin{array}{c} 10 \\ 22 \end{array}$	$\begin{array}{c} 12 \\ 27 \end{array}$	19	•
umberland County	16	11	22	24	24	13	
Millville	6	.7	_5(	3	. 8	12	
ssex County	48	17) 5	15) 6	19 1	23 5	$\frac{21}{7}$	
East Orange Irvington Montclair Newark	14	111	20	20	20	15	
Irvington	1 1	1	4	8	. 6	2	
Montclair	10 280	11 249	255	308	13 287	$\frac{11}{279}$	3
Orange	35	19	200	38	20	18	3
West Orange		7	2	7	<b>-</b> 5	7	
loucester County	20	17	12 13	32 22	23	28	
udson County	69 28	39 16	13 21	22 25	29 23	36 29	
Hoppigon	5	3	21	27	23	28	
Hoboken	55	41	57	78	80	75	1
Hoboken  Jersey City  Kearny	188	140	158	179	194	236	2
Kearny	····ii	····i4	12	19	10 15	6 14	
West Hoboken			21	14	12	29	
West New York	1 1		4	9	5	8	
funterdon County	17	17	12	22 9	26	28	
Iercer County	15 73	6	13 54	60	9 71	8 74	
iddlesex County	20	22	18	20	18	25	
New Brunswick	23	18	19	26	19	28 17	
South Amboy	18	9 2	11 5	9	5 4	17	
Ionmouth County	48	42	50	55	57	48	•
Trenton  Iddlesex County  New Brunswick  Perth Amboy  South Amboy  Long Branch  Red Bank  County	11	13]	10	13	8	13	•
Red Bank	انهٔ ۱۰۰۰	30	26 26	44	3 35	36	
Dover	34 3	30	20	. 6	. 30	9	
forris County  Dover  Morristown	14	8	12	. 8)	13	10	
	17	11	12	14	13	16	
assaic County Passaic City	17 10	11	6 15	$\frac{11}{12}$	21	17 20	
Paterson	94	44	60	75	70	84	1
alem County	7	14	ii)	16	14	9	
Salem City	7		4	5	.7	9	
North Plainfield	31	17	22	17	17 2	19	
ussex County	iö	6	8	13	9	12 17	
Salem City Omerset County North Plainfield unorth Plainfield nion County Elizabeth Districted	10	10	91	15	11	17	
Elizabeth	50 11	48( 14)	28 15	45 ( 9)	50 15	51 13	
Plainfield	14	14	14	12	19	13	
Summit	[ <del></del> [	1	4	7	5	]	
Varren County	13	14	16	17	24	21	
Phillipsburg	6	5	4	4	8	5	
Total	1,620	1,246	1,371	1,686	1,722	1,840	2,2

TABLE 56.—SHOWING DEATHS IN NEW JERSEY, BY MONTHS, FROM CERTAIN SELECTED DISEASES, FROM JULY, 1906, TO DECEMBER, 1907.

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526 526 538 538 538 538 538 539 530 530 530 530 530 530 530 530 530 530	555
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25 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	88
252 252 252 252 253 253 253 253 253 253	198
\$25.55.55.55.55.55.55.55.55.55.55.55.55.5	106
162 112 112 123 124 134 135 135 135 135 135 135 135 135 135 135	216
221 24 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	175
8222222 <b>2522222</b>	818
282 282 282 282 282 282 282 282 282 282	352
888888888888888	8
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424484 88846245484	
\$222,622 \$25	270
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l 1906.  Luy.  Luy.  Luguat.  Eptember  Eccember	ecember
	er.         24         29         18         85         24         25         54         7         27         51         18         85         27         51         18         85         87         27         112         16         85         87         27         112         16         85         87         70         91         94         76         112         16         85         87         70         91         94         76         112         16         80         27         14         16         80         27         14         16         80         27         14         16         80         27         14         16         80         27         14         16         80         27         14         16         80         27         17         14         80         27         14         16         80         27         14         16         80         27         14         16         80         27         14         16         80         27         14         16         80         27         14         16         80         27         14         16         80         27         14 <th< td=""></th<>

TABLE 57.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES,
THE YEAR ENDING

					A.G	E I	PEI	RIO	DS.				_
DEATHS IN ATLANTIC CITY.	Under one month.	Under one year.	One to five.	Five to ten.	Ten to fifteen.	Fifteen to twenty.	Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to fifty-five.
Typhoid Fever	***	•••	ï			2	1			2	2		
Measles. 5 Whoping Cough 7 Upotheria and Croup. 8 Influenza 9	ï	6	4										
Diphtherla and Croup8	***	1		2 1	1		•••	***		+4+			
	77.	ï		1 1	١.	:::	ï	***	D	***	***	***	
Of the Lungs			2	٠	1		8	8	6	8	2		
Tuberculosis. Of the Meninges	***	1		2		1	1	1	**	***	***	***	
Of Other Organs									ï	8	1		
Sypnius	•••						1		:::	•••			1
Of the Stomach and Liver B	***	***	١					***		***	ï	ï	
Cancer. Of the Intestines and Rectum	***		١			•••							
Of the Female Genital Organs					•••	:::					1	1	2
Rheumatism		***											
Diabetes	***	:::			•••	2		1				•••	
T b 1-	200				1								***
Letterma	***				••••			***		ï	+++	1	***
Simple Meningitis39	ï	2	3	ï	 	ï	"	1			***		
Progressive Locomotor Ataxia40			١										
Softening of the Brain 43	***	2			···		***		1	1	***		
Paralysis Without Indicated Cause44											1		
General Paralysis45 Other Forms of Insanity46	***	***	1	•••	•••					***		-	2
Convulsions of Infants49	2	2	3					222		***	115		
Tetanus	٠		:::			1							
Chorea	I		:::				ï	***	***	444	***	***	***
Diseases of the Ears54	١		٠.;	1		l l	l				-:	•••	
Endocarditis		ı	1	1	ï	2 1			3	·;;	2 5	···	9
Angina Pectoris									<b> </b>	1			
Organic Diseases of the Pearl         58           Angina Pectoris         58           Diseases of Arteries, Atheroma, Aneurism, &c.         59           Hemorrhage         65           Diseases of the Larynx and Thyroid Body         68           Acute Bronchitis         69	1		<u>  :::</u>		ï	•••					1	•••	1
Diseases of the Larynx and Thyroid Body68		1										•••	
Acute Bronchitis		1	1	ï			ï					•••	۱
Broncho-Pneumonia	١	ï	4	l			ļ. <u>.</u> .	:::	:::			•••	
		6	6	2	ļ	2	3	1	2		5	3	1
Pleurisy	<u>  :::</u>	۱.,	1	:::			1	1			;;	•••	ŀï
Asthma		١	î										
Other Diseases of the Respiratory System	3			•••				ï	1		ï		
Pneumonia         72           Pleurisy         73           Congestion and Apoplexy of Lungs         74           Asthma         76           Other Diseases of the Respiratory System         77           Ulcer of Stomach         80           Other Diseases of the Stomach (Cancer excepted)         81           Infantile Diarrheea, Athrepsia         82           Diarrheea and Enteritis         83	2	ï	2		<b></b>	ï		<b>*</b>					
Infantile Diarrhea, Athrepsia	1	$2\bar{4}$		1	ļ		ļ		ļ			·:;	ļ.,
		<u>  : : :</u>	 		<b> </b>	:::			<u> </u>	1		1	
Hernia and Intestinal Obstructions		1			١			1					ï
			•••					1	ï			ï	
Other Diseases of the Liver92			j		3	1	l				lI	11	l
Cirriosis of the Liver         90           Other Diseases of the Liver         92           Inflammatory Peritonitis (Non-Puerperal)         93           Appendicitis         95           Acute Nephritis         96			٠.,	ï	·.;	1 1 1	٠			•••	1 1	ļ	2
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in the statistical divisions of the state of new jersey, for december 31, 1906.

	N.	TAL		C					ry.	VI	TI	N/				COLOR.	x.	SE		DS.	ERIO	9E P	A	
Totals	Not stated.	Widowed.	Single.	Married.	Not stated.	Other foreign.	Sweden.	Hungary.	Scotland.	Italy.	Ireland.	Germany.	France.	England.	United States.	Color of decedent white unless desig- nated by mark.	Female.	Male.	Not stated.	Over ninety.	Eighty to ninety.	Seventy to eighty.	Sixty to seventy.	Fifty-five to sixty.
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		*****	11										***	***	11	2	7	14	+ ++++			*****		*****
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		3	3	3						***	1	1	***	,,,	7		6	3	******			1	1	4
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****		3	6	2 9	***	***	***	***	***	***	444	1	***	1	8	1	3 2	8 6	*****			3	******	*****
1		4	5	9	1	1		1	1		2			2	10		7	11			1	2	1	4

TABLE 57.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES,
THE YEAR ENDING

Diseases of the Bladder.       102         Other Diseases of the Uterus.       112         Accidents of Pregnancy.       116         Puerperal Septicæmia.       119 A         Phlegmon. Acute Abscess.       128         Other Diseases of Bones.       132         Malformations       137         Congenital Debility, Iterus and Sclerema.       138 ½         Infantile Inanition, Want of Care.       139 I         Senile Debility.       141         Suicide or Attempt       By Poison.       A         By Asphyxia.       142		One to fine	1			Fifteen to twenty.		Twenty-fiv	Thirty to thirty		L: E Forty to forty-five.	: ; ce   Forty-five to fifty.
Malformations         137           Congenital Debility, Icterus and Selerema         138 ½           Infantile Inanition, Want of Care         139 1           Senile Debility         141           Suicide or Attempt         By Poison         A           By Poison         By By Poison         By By By By By By By By By By By By By B				## ## ##	***	2	ï		***		3	3
Suicide or Attempt By Asphyxia	1	6	1 2 1	***		***	1				***	1
Burns by Fire 146 A	4: 1:			1 3 ±10		***		14	1 8	ii	***	4
	i		***	***	2	ï	1	2	3	i	2	
	1		***			***			1	***		

Total deaths, 710. Death-rate, 17.95.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1906—(Continued).

	▲G	E PE	BIOI	08.		SE	x.	COLOR.				NA	TI	VII	r¥.					C	SOC	IAL	ī	<u> </u>
Fifty-five to sixty.	Sixty to seventy.	Seventy to eighty.	Eighty to ninety.	Over ninety.	Not stated.	Male.	Female.	Color of decedent white unless designated by mark.	United States.	England.	France.	Germany.	Ireland.	Italy.	Scotland.	Hungary.	Sweden.	Other foreign.	Not stated.	Married.	Single.	Widowed.	Not stated.	Totals.
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	1					i			li											i				
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TABLE 58.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES,
THE YEAR ENDING

							1	LG1	E P	ER	IOD	8.			
	DEATHS IN BAYONN	IN BAYONNE.							Fifteen to twenty.	Twenty to twenty-five.	Twenty-five to thirty.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	
Typhoid Fever			1			+++	1				1	1	-		1
loomlot Momon					1	6						i			1
Vhooping Cou	h. Crouppticæmia		7	***	4	6				***	***	1.			1
iphtheria and	Croup		8			9	1					0 4		1	d
nfluenza			9												1
yæmia and se	рысæшіа	•••••	I4	***	***						1 .	1			1
ntermittent F			19		1	1					***	1	ï		1
- 1	Of the Lungs Of the Meninges Of the Peritoneum Of the Skin Of Other Organs	······ )	( A		4	3		2	2	10	10	8 14	111	4	ŀ
uberculosis.	Of the Meninges		B									•••••	-  1		ŀ
troercurosis.	Of the Skin	} %%	1 b	•••	***		-	•••	•••				· ···		ĺ
	Of Other Organs		E					1							١
yphilis	· · · · · · · · · · · · · · · · · · ·	····	84		1				]		.		.1		
Of the	e Mouth	······ )	AB		+++			•••	•••			1 ;	: ·:;	1	
ancer. Of the	e Stomach and Liver e Female Genital Organs	25	Į B		vev	***		•••	•••				1 2	1 2	ŀ
Of th	e Breaste Skin		E										.		Ί
↓ Of tl	ie Skin	J	F		***			٠			.	<u></u>	.		
ineumatism			26		+++	***		1	1			1			1
Exophthalmic	Goitre		29				l:::	•••				:: :::	: :::	2	1
.eukemia	ute or Chronic)		31	499	955								.		
Alcoholism (Ac	ute or Chronic)	•••••••	34	***	***					1	1	1	٠	1	-
erebral Hemo	rhage and Congestion	••••••	38	**	2						ï	il i	il'ï	3	
oftening of th	itisrrhage and Congestion e Brainut Indicated Cause	· • • • • • • • • • • • • • • • • • • •	43	22	***									ļ	1
Paralysis Witho	ut Indicated Cause		44		***			•••				:: 'ï	l	{	
eneral Paraly	sis. Insanity	••••••	45	•••				•••				·- ···	ï		1
Cnilensy	Illisamity		47		***			•••					1		1
onvulsions of	Infants	· · · · · · · · · · · · · · · · · · ·	49	10	8	4									
etanus	Infants of the Nervous System	•••••	50					1			-		٠.		٠
					1	ï	ï	•••		ï	ï	2	1 4	ï	ŀ
organic Disease	s of the Heart	••••••••••••••••••••••••••••	57	1		i		·::			1	.   i	3	Ιí	
ngina Pectori	<u></u>		58								.		.		١.
Diseases of the	s of the Heart Larynx and Thyroid Body. is	••••••	68		2		1	•••			1.	·- ·-	• •••		٠
Broncho-Pneur	is	••••••	08 71	3		10		•••		:::	-			•••	1
monto			79	1	11	15	3	1	ï	3	ï	3 7	7 7	4	i
leurisy	Apoplexy of Lungsngs.	······	73			1					.		.	ļ	٠١
Congestion and	Apoplexy of Lungs	•••••	74	6	1	1		•••				••	• •••	۱۰۰۰	٠l
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ther Diseases	of the Respiratory System		77 B	1		2							.	J	
licer of the Sto	of the Respiratory System mach		80								-	:	.  1		٠J
nfantile Dierr	on the Stomach (Cancer exc nea Athrensia	:ep:ea)	81	9	78	14	ï	•••			::: .	1¦	·}···		·l
narrnœa anu i	Litterius		80	1		1				ï		2 2	ï	ľi	ا
Ovsentery			84	١	1	1					.		٠	١	۱.
ternia and Int	estinal Obstructions	••••••	86			1		•••			·; ·	·· ···	-  1	١	ا:
hther Diseases	Liver of the Liver	•••••	೪U	1.2							1		. 2	1	4
nflammatory I	eritonitis (Non-Puerperal).		93	۔۔۔ا			ï			2	:	ï	i		:
ppendicitis	······································	***************************************	95								].		.		
cute Nephritis	of the Liver. Peritonitis (Non-Puerperal). Bladder		96		٠٠:					اي.	-	.1 2	યું	1	:
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in the statistical divisions of the state of new jersey, for december 31, 1906.

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Fifty-five to sixty.	Sixty to seventy.	Seventy to eighty.	Eighty to ninety.	Over ninety:	Not stated.	Male.	Female.	Color of decedent white unless designated by mark.	United States.	England.	France.	Germany.	Ireland.	I Italy.	Scotland.	Hungary.	Sweden.	Other foreign.	Not stated,	Married.	Single.	Widowed.	Not stated.	Totals.
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# 312 REPORT OF THE BOARD OF HEALTH.

TABLE 58.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES,
THE YEAR ENDING

					AGE PERIODS.											
DEATHS IN BAYONNE.	Under one month.	Under one year.	One to five.	Five to ten.	Ten to fifteen,	Fifteen to twenty.	Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Thirty-five to forty.	Forty to forty-five.	Forty-five to fifty.	Fifty to fifty-five.			
Other Diseases of the Uterus	2					***				1						
Accidents of Pregnancy	6							1	***		+++	***				
Puerperal Metroperitonitis		***	***	***		***		***	1		***					
Erysipelas	5		7	**		1		***	1.1	1		***				
Las y the product of correct contract of contract the contract of the contract												777	1			
Anthrax Carbuncle	7															
Other Diseases of the Skin and Adneya 129 I	F 1					1				l						
Other Diseases of the Skin and Adneya 129 I	F 1					1				l						
Other Diseases of the Skin and Adneya 129 I	F 1					1				l						
Other Diseases of the Skin and Adnexa	F 1 3 8 46 9 5	22 22	3		***			11 11		1 1 1						
Other Diseases of the Skin and Adnexa	F 1 3 8 46 9 5	222	3		1 2 2 3 4			11 11		1 1 1	::					
Other Diseases of the Skin and Adnexa	F 1 3 8 46 9 5	222	3		1 1 1 1 1 1 1					***	· · · · · · · · · · · · · · · · · · ·					
Other Diseases of the Skin and Adnexa	F 1 3 8 46 9 5	222	3		1 1 1 1 1 1 1					***	· · · · · · · · · · · · · · · · · · ·					
Other Diseases of the Skin and Adnexa	F 1 3 8 46 9 5	222	3	   	1		1	1 3	i	4	1	  1				
Other Diseases of the Skin and Adnexa   129	F 1 38 468 9 5 B	2222	3	111	1	2	111	1 3	1	4	1	ï				
Other Diseases of the Skin and Adnexa   129   1	F 1 38 46 9 5 1 B 7	2222	3	111	1	2	 1 1	1 3	i	4	1 2	ï				
Other Diseases of the Skin and Adnexa   129   1	F 1 38 46 9 5 1 B 7	22 22 22 22 22 22 22 22 22 22 22 22 22	3	111	1	2	1 1 2	1 3	1	4	1 2	ï				
Other Diseases of the Skin and Adnexa   129 1	F 1 3 8 46 9 5 5 8 7 8 7 8	22 22 22 22 22 22 22 22 22 22 22 22 22	3	111	1	2	1 1 2	1 3 1	1	4	1 2	ï				
Anthrax Carbuncle	F 1 38 46 9 5 5 8 7 8 7 9	222 22	3	111	1	2	111	1 3	1 2	4	1 2	ï				
Other Diseases of the Skin and Adnexa   129   1	F 1 38 466 9 5 1 B 7 8 7 9 1 1	22 22 22 22 22 22 22 22 22 22 22 22 22	3	111	1	2	111	1 3	1 2	4	1 2	ï				

Total deaths, 759. Death-rate, 17.18.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1906—(Continued).

	AG	E PI	RIOI	os.		SE	х.	COLOR.				NA	TI	VII	Y.					C	SOC	IAL	ī	<del></del>
Fifty-five to sixty.	Sixty to seventy.	Seventy to eighty.	Eighty to ninety.	Over ninety.	Not stated.	Male.	Female.	Color of decedent white unless designated by mark.	United States.	England.	France.	Germany.	Ireland.	Italy.	Scotland.	Hungary.	Sweden.	Other foreign.	Not stated.	Married.	Single.	Widowed.	Not stated.	Totals.
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### 314 REPORT OF THE BOARD OF HEALTH.

TABLE 59.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES,
THE YEAR ENDING

					A G	E I	PEF	io	DS.			=
DEATHS IN BLOOMFIELD.	Under one month.	Under	One to five.	Five to ten.	Ten to fifteen.	Fifteen to twenty.	Twenty to twenty-five.	Twenty-five to thirty.	Thirty to thirty-five.	Ę.	Forty to forty-five.	Fifty to fifty-five.
Typhoid Fever         1           Whooping Cough         7           Diphtheria and Croup         8           Influenza         9		ï	•••	1	 		ï					
Tuberculosis. Of the Lungs		 	 1		 	1	2	4	3 1	2	3	:: :::
Of the Mouth												. 2
Simple Meningitis. 39 Cerebral Hemorrhage and Congestion. 42 Paralysis Without Indicated Cause 44	 	1 1			ï							i
General Paralysis         45           Epilepsy         47           Convulsions of Infants         49           Endocarditis         56           Organic Diseases of the Heart         57	ï	 	•••	 	•••					ï	-	
Angina Pectoris 58 Diseases of Arteries, Atheroma, Aneurism, &c. 59 Hemorrhage 65 Acute Bronchitis. 69		 									-	
Broncho-Pneumonia         71           Pneumonia         72           Other Diseases of the Stomach (Cancer excepted)         81           Infantile Diarrhesa         Athrensia           82	ï	1 2 1 9	1 5 1 3							1	-	
Diarrhoea and Enteritis		 		 	 	 	 	::: :::	 	ï	-	:- :-
Inflammatory Peritonitis (Non-Puerperal)         93           Acute Nephritis         96           Bright's Disease         97           Diseases of the Bladder         102           Uterine Tumors (Non-Cancerous)         111		· · ·	٠	٠	1		1	١				
Uterine Tumors (Non-Cancerous)	3	 4 2	 2				1	"i				
Other Accidental Injuries         145           Burns by Fire         146           Inhalation of Noxious Gases (Suicide excepted)         150           Other Tumors         159			ï			1 4				1	1	
Totals	-	<del> </del>	 	<del> </del>	<u>-</u>	1	-	-	ļ		- -	- -

Total deaths, 170. Death-rate, 14.09.

IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1906.

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Fifty-five to sixty.	Sixty to seventy.	Seventy to eighty.	Eighty to ninety.	Over ninety.	Not stated.	Male.	Female.	Color of decedent white unless designated by mark.	United States.	England.	France.	Germany.	Ireland.	Italy.	Scotland.	Hungary.	Sweden.	Other foreign.	Not stated.	Married.	Single.	Widowed.	Not stated.	Totals.
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(419)

Absecon, board of health of	• • • • • • •	94
Acquackanonk township, board of health of		95
Alexandria township, board of health of		95
Allamuchy township, board of health of		95
Allendale, board of health of		84
Allenhurst, board of health of		84
Allentown, board of health of		84
Alloway township, board of health of		95
Alpine, board of health of		84
Andover, board of health of		84
Andover township, board of health of		95
Anglesea, board of health of		84
Animals, infectious diseases of		67
Animals, infectious diseases of, report on		129
Anthrax	67,	129
Appropriations for uses of State board of health		3
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